

Purchasing Week

McGraw-Hill's National Newspaper of Purchasing

Vol. 3, No. 51

New York, N. Y., December 19, 1960

\$6 A YEAR U.S. AND CANADA \$25 A YEAR FOREIGN

Price Perspective	2
Washington Perspective	4
Management Memos	10
Purchasing Week Asks	11
Foreign Perspective	19
New Products	24

Accent on Thrift Puts Compacts Into High Gear

NAPA's Proposed Plan to Upgrade Purchasing



NAPA's Boney

- | Objective | Proposed Method | Proposed Financing |
|--|--|--|
| • Upgrade management's image of the purchasing function. | • Give universities financial incentive to provide courses. | • Bulk of cost probably would be borne by NAPA treasury. |
| • Offer present P.A.'s more facilities for self-improvement. | • Subsidize professorships, fellowships, scholarly research. | • Local associations may be asked to aid with the financing. |
| • Attract more bright young men into purchasing as a career. | • Sponsor more management development conferences. | • NAPA dues increase from \$18 to \$25 may be necessary. |



... and Berry

Future of Wee Trucks For Fleet Operations Also Looks Promising

New York—One year after the introduction of U. S. compact cars, it's apparent that the auto makers either are omniscient or have a potent rabbit's foot.

In terms of fleet sales, here's what is happening: The wave of cost-consciousness that's sweeping industry is giving the compacts a hypo such as no man-made promotion could. The same might happen to the brand new compact trucks.

One fleet buyer who is upping his compact purchases 100% this year put it this way to PURCHASING WEEK: "Compacts arrived for us at just the right time. Cost reduction is a passion right now. By using compacts, we'll be able to save thousands of dollars this year."

As for the new trucks, White Motor Co. made the dramatic news last week that it will boost output of its Cleveland division by 15% to 20% in January to make room for its new compact truck entry.

In the coming year, four newcomers—International Harvester's Scout, Ford's Econoline, Chevrolet's Corvair 95 (Corvan), and the White Compact—will get into the compact truck arena. Alongside them will be the established veterans in the half-ton truck category, as well as previously-announced compacts: The Willys Jeep and compact-size line of trucks, Volkswagen's compact truck, and Ford of England's Thames. Additionally there's Studebaker's Champ (pickup truck), International Harvester's own Metro-Mite (small delivery

(Turn to page 30, column 3)

NAPA Planners Map \$600,000 Program To Build Purchasing as a Career Profession

Chicago—NAPA officers are on the verge of asking the association's members to underwrite a comprehensive professional development program that would require expenditures of more than \$600,000 during the next five years.

The program—still in the planning stage—is aimed at giving purchasing a professional standing second to none in the eyes of business management.

Blueprinted as part of NAPA President Paisley Boney's drive to revitalize the association's development activities, it envisions the use of NAPA funds to:

- Establish professorships and fellowships at major colleges and universities to provide major courses in purchasing at both the undergraduate and graduate student level. The goal is to open a grass roots source of executive talent and induce bright young men to make purchasing their career.

- Provide research grants and

(Turn to page 29, column 3)

Lead and Zinc Prices Dip As Output Tops Demand; Further Cut in Zinc Seen

New York—Lead and zinc prices dropped last week—1¢/lb. for lead and ½¢/lb. for zinc. The dip was expected to stabilize lead tags at 11¢/lb. (delivered in New York). But industry experts felt the current zinc quote of 12½¢/lb. (East St. Louis delivery) would fall another ½¢/lb. soon.

"Traditionally," commented one smelting executive, "zinc cuts come in two drops of ½¢/lb. each. So most of us expect a 12¢ price for zinc in a few days."

The price drops brought on a host of tag reductions for related products.

Lead products which were immediately cut 1¢/lb. included oxides (used in paint) and sheet and pipe.

The new price for lead sheet and pipe is 16½¢/lb. The new carlot quotes for lead oxides are

(Turn to page 4, column 3)

Snow & Closings Tie Many P.A.'s In Holiday Knots

New York—The blizzard that snarled industry and transportation along the Eastern Seaboard last week complicated life for some purchasing men whose plants were operating on razor-thin inventories. Deliveries from many suppliers were set back two to three days; but shippers promised to have the backlog caught up by this week by running extra trucks, trains, and planes.

Inventory-conscious buyers—whose predicament could have been much worse had industry generally been operating with more zip—face some new problems this week unless they have allowed for supplier decisions to shut down slow-moving production lines during the holiday period.

A PURCHASING WEEK checkup
(Turn to page 29, column 3)

Electrical Firms Ponder Philadelphia Aftermath

New York—Major defendants in the electrical equipment industry anti-trust suits took the initiative last week to determine whether customers paid "unfair" prices as a result of alleged pricing violations by some of their officials.

The action came as some buyers, principally governmental purchasers, indicated they were considering legal action to recover damages from the defendant electrical companies.

General Electric Co., Westinghouse Electric Corp., and Allis-Chalmers Manufacturing Co. announced plans to investigate voluntarily purchases by private

(Turn to page 30, column 1)

This Week's

Purchasing Perspective

DEC. 19-25

Purchasing leaders occasionally entertain proposals to impose higher standards of purchasing performance through certification or licensing requirements. Proponents of certification tests cite attorneys, doctors, CPA's, and engineers as examples of professional men who must surmount rigorous qualification hurdles before they are granted full authority to practice their learned skills.

In Britain, industrial buyers must meet strict age and experience requirements, then take an extensive written examination before they can attain the coveted professional rank of "P.O."—purchasing officer. In this country, a governmental purchasing group is considering the feasibility of setting similar standards through tests.

• • •

The question of certification and licensing came up recently before the NAPA Professional Development Committee that developed the extensive education program reviewed in col. 1.

(Turn to page 29, column 1)

P/W PANORAMA

- **The Telephone Is a Convenience** that has become a necessity. And new devices are constantly coming on the market to make business-by-phone even more efficient. For a look at some of the latest gadgets, see spread on pages 16 and 17.

- **The World-Wide Glut in Raw Materials** and the ensuing drop in prices are causing some anxious moments for many producing nations. One result is a new outcry for commodity controls. Story on pages 8 and 9 appraises the situation.

- **How Can You Tell** how far to go in a price war? One way is the method used to solve one of the problems in this week's session of PW's 'School for Strategists.' Try working out the Price War puzzle and companion game, both on page 20.

- **Urethanes Are Expanding Their Foothold** in markets where tough coatings are a must. These already range from golf balls to tires—and the list is constantly growing. For a run-down on urethanes, see the Product Perspective on page 25.

Steel Barometer Dies

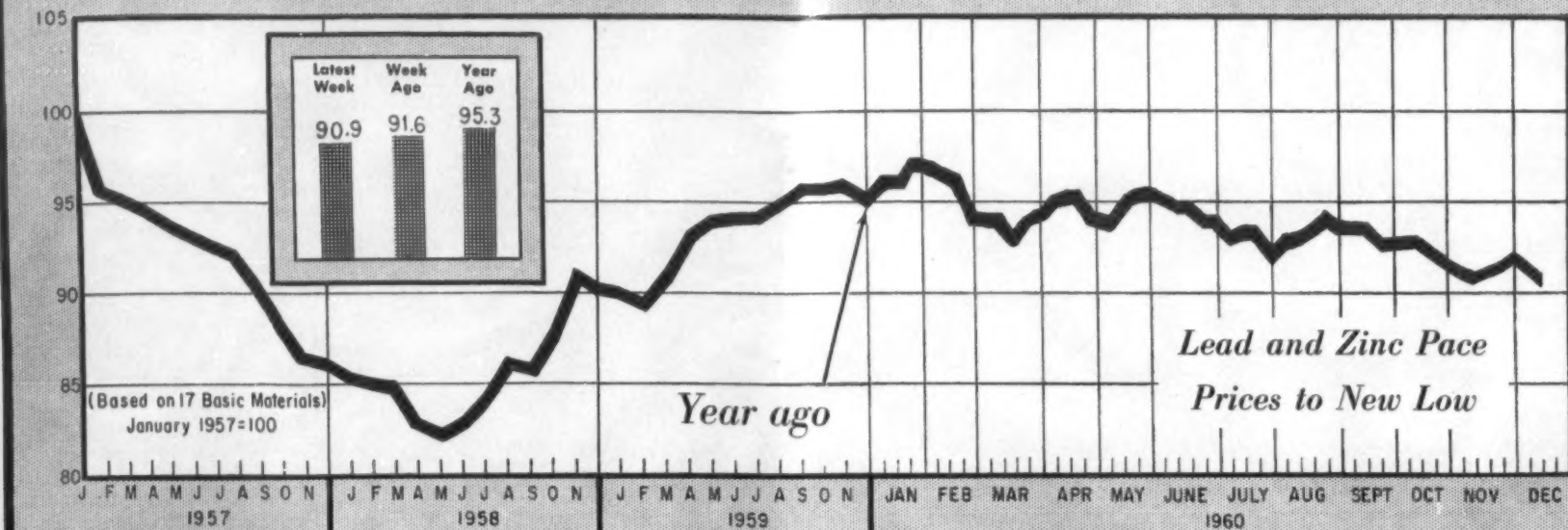
New York—The steel industry has announced the death of one of the most widely quoted barometers of economic activity—the weekly steel operating rate as measured by percentage of total capacity.

American Iron & Steel Institute said that starting in January, it would substitute weekly and cumulative figures on raw steel production, plus an index based on average weekly output in 1957-59.

The Institute also said it no longer would supply figures on total industry capacity. It called the old steel rate figure "unrealistic."

Purchasing Week Industrial Materials Price Barometer

This index, based on 17 basic materials, was especially designed by the McGraw-Hill Department of Economics.



This Week's Commodity Prices

METALS

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Pig iron, Bessemer Pitts., gross ton.....	67.00	67.00	67.00	0
Pig iron, basic valley, gross ton.....	66.00	66.00	66.00	0
Steel, billets, Pitts., net ton.....	80.00	80.00	80.00	0
Steel, structural shapes, Pitts., cwt.....	5.50	5.50	5.50	0
Steel, structural shapes, Los Angeles, cwt.....	6.20	6.20	6.20	0
Steel, bars, del., Phila., cwt.....	5.97	5.97	5.975	-.1
Steel, bars, Pitts., cwt.....	5.675	5.675	5.675	0
Steel, plates, Chicago, cwt.....	5.30	5.30	5.30	0
Steel scrap, #1 heavy, del. Pitts., gross ton.....	27.00	27.00	42.00	-35.7
Steel scrap, #1 heavy, del. Cleve., gross ton.....	25.00	25.00	41.00	-39.0
Steel scrap, #1 heavy, del. Chicago, gross ton.....	26.00	25.00	40.00	-35.0
Aluminum, pig, lb.....	.26	.26	.26	0
Secondary aluminum, #380 lb.....	.23	.23	.238	-3.4
Copper, electrolytic, wire bars, refinery, lb.....	.296	.296	.346	-14.5
Copper scrap, #2, smelters price, lb.....	.24	.24	.26	-7.7
Lead, common, N.Y., lb.....	.11	.12	.125	-12.0
Nickel, electrolytic, producers, lb.....	.74	.74	.74	0
Tin, Straits, N.Y., lb.....	1.014	1.019	.989	+2.5
Zinc, Prime West, East St. Louis, lb.....	.125	.13	.125	0

FUELS†

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Fuel oil #6 or Bunker C, Gulf, bbl.....	2.30	2.30	2.00	+15.0
Fuel oil #6 or Bunker C, N.Y., barge, bbl.....	2.62	2.62	2.37	+10.5
Heavy fuel, PS 400, Los Angeles, rack, bbl.....	2.05	2.05	2.15	-4.7
Lp-Gas, Propane, Okla., tank cars, gal.....	.045	.045	.05	-10.0
Gasoline, 92 oct. reg., Chicago, tank car, gal.....	.126	.126	.116	+8.6
Gasoline, 84 oct. reg., Los Angeles, rack, gal.....	.105	.105	.11	-4.5
Kerosene, Gulf, Cargoes, gal.....	.09	.09	.093	-3.2
Heating oil #2, Chicago, bulk, gal.....	.098	.098	.096	+2.1

CHEMICALS

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Ammonia, anhydros, refrigeration, tanks, ton.....	94.50	94.50	88.50	+6.8
Benzene, petroleum, tanks, Houston, gal.....	.34	.34	.31	+9.7
Caustic soda, 76% solid drums, carlots, cwt.....	4.80	4.80	4.80	0
Coconut oil, inedible, crude, tanks, N.Y. lb.....	.139	.14	.186	-25.3
Glycerine, synthetic, tanks, lb.....	.293	.293	.293	0
Linseed oil, raw, in drums, carlots, lb.....	.162	.159	.181	-10.5
Phthalic anhydride, tanks, lb.....	.195	.185	.165	+18.2
Polyethylene resin, high pressure molding, carlots, lb.....	.275	.275	.35	-21.4
Rosin, W.G. grade, carlots, fob N.Y. cwt.....	18.10	18.10	13.10	+38.2
Shellac, T.N., N.Y. lb.....	.31	.31	.31	0
Soda ash, 58%, light, carlots, cwt.....	1.55	1.55	1.55	0
Sulfur, crude, bulk, long ton.....	23.50	23.50	23.50	0
Sulfuric acid 66% commercial, tanks, ton.....	22.35	22.35	22.35	0
Tallow, inedible, fancy, tank cars, N.Y. lb.....	.06	.06	.06	0
Titanium dioxide, anatase, reg. carlots, lb.....	.255	.255	.255	0

PAPER

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Book paper, A grade, Eng. finish, Untrimmed, carlots, cwt.....	17.75	17.75	17.20	+3.2
Bond paper, #1 sulfite, water marked 20 lb, car. lots, cwt.....	25.20	25.20	25.20	0
Chipboard, del. N.Y., carlots, ton.....	100.00	100.00	95.00	+5.3
Wrapping paper, std. Kraft, basis wt. 50 lb rolls.....	9.50	9.50	9.25	+2.7
Gummed sealing tape, #2, 60 lb basis, 600 ft. bundle.....	6.60	6.60	6.30	+4.8
Old corrugated boxes, dealers, Chicago, ton.....	15.00	15.00	22.00	-31.8

BUILDING MATERIALS‡

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Cement, Portland, bulk carlots, fob New Orleans, bbl.....	3.65	3.65	3.65	0
Cement, Portland, bulk carlots, fob N.Y., bbl.....	4.20	4.20	4.18	+.5
Southern pine, 2x4, s4s, trucklots, fob N.Y., mftbm.....	116.00	116.00	126.00	-7.9
Douglas fir, 2x4, s4s, carlots, fob Chicago, mftbm.....	129.00	129.00	136.00	-5.1
Spruce, 2x4, s4s, carlots, fob Toronto, mftbm.....	82.00	82.00	89.00	-7.9
Fir plywood, 1/4" AD, 4x8, dealer, crlid, fob mill, msf.....	68.00	68.00	68.00	0

TEXTILES

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Burlap, 10 oz. 40", N.Y., yd.....	.141	.142	.105	+34.3
Cotton middling, 1", N.Y., lb.....	.323	.323	.332	-2.7
Printcloth, 39", 80x80, N.Y., spot, yd.....	.179	.179	.230	-22.2
Rayon twill, 40 1/2", 92x62, N.Y., yd.....	.215	.22	.24	-10.4
Wool tops, N.Y., lb.....	1.470	1.470	1.635	-10.1

HIDES AND RUBBER

	Dec. 14	Dec. 7	Year Ago	% Yrly Change
Hides, cow, light native, packers, Chicago, lb.....	.170	.170	.19	-10.5
Rubber, #1 std ribbed smoked sheets, N.Y., lb.....	.289	.286	.404	-28.5

† Source: Petroleum Week ‡ Source: Engineering News-Record

This Week's

Price Perspective

DECEMBER 19-25

NOW IT'S UNANIMOUS—The last two major metal holdouts, lead and zinc, now have succumbed to the price easiness in the mineral markets.

This weakness is a result of poor demand and rising stocks both here and abroad. It was this combination of factors that last week forced reductions of 1¢/lb. and 1/2¢/lb. in lead and zinc respectively.

These factors show up most clearly in copper where fabricator consumption is running well below a year ago, and refined stocks are up a whopping 75% above late 1959 levels.

Further cuts in the red metal can be expected—unless business perks up. Some industry experts see the price sinking to as low as 28¢/lb. by next spring. That would be a sharp 5¢/lb. or 15% below the quotes prevailing in early October of this year.

STEEL AND ALUMINUM ALSO HARD-PRESSED—It's no secret that much the same weaknesses are also apparent in steel and aluminum—despite the fact that list prices on these two metals are holding fairly steady.

The buyer who doesn't get some sort of discount today is the exception rather than the rule. It's estimated, for example, that as much as 40% of warehouse steel is now going for less than list—with the average discount amounting to 4%-5%.

And with December business in steel service centers off about 10%, some observers see this price cutting continuing well into 1961.

In aluminum, the situation is most acute in extrusions, where a no-holds-barred competitive battle is raging between primary producers and the independents. According to Lewis C. Laderer, new president of the Aluminum Extruders Council, the fight "has only helped to lower extrusion prices to our customers to a price at or below cost level."

The competition here basically stems from falling demand. Extrusion shipments this year are estimated at only 445,000 tons, 11% below the 500,000 tons shipped last year. Huge capacity—now up to 1,250,000 tons—is only tending to aggravate the situation.

BUCKING THE TREND—Magnesium is successfully resisting price and demand trends noted in most metal markets.

Shipments this year are estimated at 51,000 tons by the Magnesium Assn. That's 6,000 tons or 13% above 1959 levels.

New uses in industry—particularly by automakers—are primarily behind the increased consumption.

Exports are helping, too. Overseas shipments in the first nine months of 1960 (5,000 tons) are already more than double the 12-month 1959 total.

This firm demand coupled with declining stocks should keep tags steady through early 1961.

HOLIDAY SEASON—All eyes are on the current Christmas buying rush.

How it goes could provide clues to the early 1961 business trend. A good season would pare down heavy durable goods inventories which are now running a significant 5% above a year ago. These stock reductions, in turn, could spur ordering all the way down the production line.

Right now the outlook is reasonably optimistic. Certainly consumers have the money for peak purchases. Disposable income, for example, is now at a record high—6% above year-ago levels.

Nor is there much doubt that people would like to buy. The latest National Industrial Conference Board survey of consumer buying intentions show the public is raising its sights on most "big ticket" consumer items.

And it now looks as though they may be translating those desires into actual purchases. One optimistic sign: Store traffic is up in most areas.

EDP Equipment Makers Keep Building Greater Speed Into Their Computers

New York—Data processing equipment makers hit the market with a host of new products last week.

Introduced within a four day period were:

- Two components designed to speed computer operations.
- Two units for sending data over phone wires.
- Three computers.

The two developments expected to have the most far reaching effect on the computer field were Remington Rand's new "thin-film" computer memory and IBM's "cryogenic thin film memory plane." Both are designed to shrink computer size, while increasing processing speed and memory capacity.

Millionths to Billionths

Remington Rand calls its device "the most advanced and fastest form of memory yet developed." Access time of the thin film device is rated in billionths of a second—in contrast to millionths rating of other computers.

The thin film computer memory consists of a series of metal dots, a few millionths of an inch thick, deposited on a thin glass plate. The memory is of the catalogue type—the information is not destroyed (as is the case with most other memory systems) when it is read out.

Development is underway to use the same thin film principle for performing computer switching operations.

IBM's cryogenic memory brought nearer to reality the possibility of an ultra-high speed computer working at very low -450 F temperatures. The tiny component, consists of 135 cryotons (devices which perform addition, subtraction, and other computer jobs).

Two Other Products

Two other new products, Digitronics Corp.'s "Dial-O-Verter System" and Friden's "Tefedata 8-channel code transmitter-receiver," are designed to send coded data over long distance phone lines.

Using Dial-O-Verter, as many as 27,000 alphanumeric characters can be sent during a three minute phone call. Units are available to handle data in the form of paper tape, punched cards or magnetic tape. Minimum data transmission rate is 1,000 words per minute.

Teledata works with an 8-channel punched paper tape. Speeds of up to 425 codes a minute are possible, and the receiving unit re-punches the data.

Remington Rand has put its new thin-film memory to work in a new computer—the Univac 1107. In addition to the film memory section, the solid-state device also has two large banks of core memory. Rental charges range from \$40,000 to \$60,000 per month with delivery quoted at 18 months to two years.

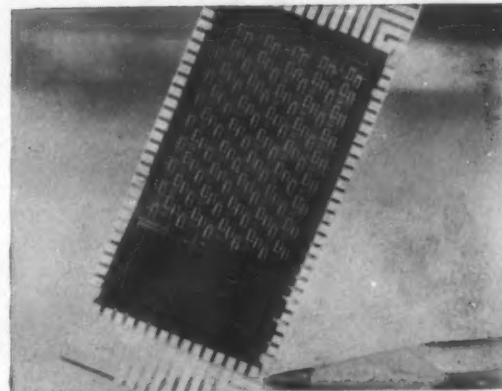
The Univac Div. unveiled a second new product last week, the Real-Time 400. The system provides instantaneous problem-solving information for situations that require rapid decision. The central computer can handle inputs from hundreds of transmitting stations—sending back

the answer immediately. Inventory and production control data, for example, would be available on an up-to-the-second basis. Monthly rentals run from \$20,000 to \$40,000.

Philco Corp. also introduced a new computer, the Model 212, billed as "four times faster than other models in the line." Increased speed was made possible by faster circuits, with diode transistor logic, and improved internal organization.



'THIN FILM' COMPUTER MEMORY: Remington Rand claims this device is "fastest form of memory yet." Its access time is rated in billionths of a second.



'CYROGENIC THIN FILM MEMORY PLANE': This IBM counterpart also is designed to make computers more compact, increase speed, enlarge memory capacity.

Facts of Light!





IT'S HOT IN THERE!

The filament in a 60 watt incandescent lamp operates at a temperature of 4530° Fahrenheit — about ten times hotter than an oven set to bake pies.

STILL BURNING after 1,000 years?

Theoretically, a lamp could be designed and built which would burn continuously for 1000 years. It would probably, however, give less light than a firefly and be useless for illumination.



FAIR AND WARM with 10,000 FOOTCANDLES

In bright sunshine on a day in June, we see by means of about 10,000 footcandles of illumination — several hundred times more light than we normally have indoors.



Balance HELPS MAKE CHAMPION LAMPS YOUR BEST BUY

When you buy Champion Lamps, you're buying lowest overall lighting cost because Champion scientifically determines the balance of lamp characteristics that give the most light for combined power cost, labor cost, and lamp cost.

CHAMPION LAMP WORKS, Lynn, Massachusetts

CHAMPION INCANDESCENT-FLUORESCENT • YOUR BEST BUY IN LAMPS

Washington Perspective

DEC. 19-25

Kennedy's choices for crucial cabinet jobs show him reaching out for men other than the obvious choices that the politicians and the political experts first suggested.

Mostly they turn out to be men the Democratic politicians approve of, but men with a professional standing in their respective fields. So far, there has been almost no sniping from the Republicans. Reason: Critics are finding it difficult to fault Kennedy's choices.

For the State Department, capable and deserving Democrats with prestige and political backing were after the top job: Adlai Stevenson and Chester Bowles. But Kennedy put these men in second-place slots and picked a younger man, Dean Rusk, 52, who was not seeking the job. Rusk rates as a smart, tough operator in foreign affairs. For the past eight years, he's been running the Rockefeller Foundation, which parcels out millions a year to deserving foreign projects all around the free world.

In Defense, Kennedy obviously had easier choices than Robert S. McNamara, 44, who only last month succeeded to the presidency of the Ford Motor Co. Kennedy wanted McNamara and went outside the group of "obvious" choices whose names figured in the earlier speculation.

McNamara will bring a fresh approach to the whole sweep of problems—reorganization of the sprawling agency, and approving a new pattern of spending the billions that go for missiles, manned aircraft, space, submarines, and the like.

In Commerce, Gov. Luther Hodges of North Carolina, 62, is a vigorous, successful businessman who proved his abilities as a government administrator and politician. Hodges will work on new ways to push the government's export expansion program—perhaps using broader export credit insurance. He also has a yen to attract more foreign capital to the U. S., a program he inaugurated in North Carolina.

Hodges will be listened to on highway controls, creation of a department of urban affairs, creation of an agency to coordinate the diverse agencies regulating transportation, and other issues up for consideration.

In Interior, Stewart L. Udall, 40, will be in charge of the policy on water resources, hydro-power developments in the West, development of minerals policy. Active in these areas as an Arizona congressman for six years, he became a leader of the Democratic liberals on these issues.

In the Budget Bureau, David E. Bell, 41, a Harvard administrator, is an expert in government fiscal control, having served in the bureau under Truman. He doesn't think government spending is the answer to everything, but he's for spending that helps the economy expand.

The consumer—a mainstay of what economic buoyance the economy has—shows no new signs of loosening up on his wallet to buy cars and appliances.

The Federal Reserve Board's latest survey of buying intentions shows that over-all, fewer consumers figure they'll be buying autos and major appliances during the 6 months ahead than were planning to buy in October a year ago.

In October, more people were planning to buy a new auto than were figuring on buying in July—but the number of potential buyers this fall is still below those of a year ago.

Weekly Production Records

	Latest Week	Week Ago	Year Ago
Steel ingot, thous tons	1,387	1,396*	2,726
Autos, units	143,163	142,590*	90,930
Trucks, units	24,197	24,006*	13,235
Crude runs, thous bbl, daily aver	7,887	7,834	7,975
Distillate fuel oil, thous bbl	12,859	12,934	13,643
Residual fuel oil, thous bbl	6,658	6,711	6,945
Gasoline, thous bbl	28,771	29,053	28,254
Petroleum refineries operating rate, %	79.7	79.2	82.0
Container board, tons	161,232	145,108	162,338
Boxboard, tons	96,315	85,501	97,968
Paper operating rate, %	93.0	85.8*	95.9
Lumber, thous of board ft	203,935	159,257	250,760
Bituminous coal, daily aver thous tons	1,218	1,278*	1,510
Electric power, million kilowatt hours	14,604	14,368	14,167
Eng const awards, mil \$ Eng News-Rec	300.9	446.1	313.8

*Revised

Jobless Total Sets November Record of 4-Million

New York—The latest Labor Dept. report (November) puts the jobless total over the 4-million mark—the largest for any November since the government began making monthly unemployment estimates back in 1940. Other disturbing signs in the labor picture:

• **Manufacturing jobs**—Some 146,000 factory workers were laid off last month—twice the normal decline for November.

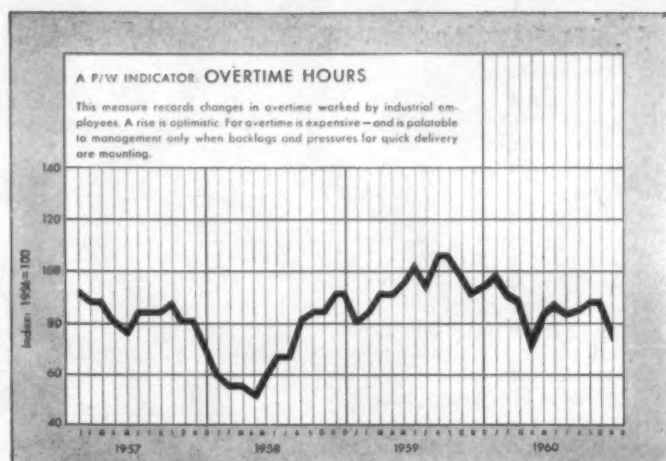
• **Part-time**—About 100,000 additional workers were forced onto part-time schedules during November. The total of such workers is now over the 1.4-million mark—some 200,000 above the level prevailing a year ago.

• **Overtime**—PURCHASING WEEK's sensitive overtime hour index declined again—falling to 78.6 (1956=100). That's 15% below last November levels.

Primary metals show the biggest overtime decline—some 50% below year-ago levels. Other durable industries where overtime is declining at a fast clip include furniture and fixtures, and nonelectric machinery.

Most soft goods industries also have joined in the decline. This is another indication that the present slowdown is spreading to all areas of the economy (see chart and table).

The high jobless figure—now topping the 4-million mark—is particularly significant, because it occurs at a time of the year when unemployment is usually relatively low.



Index of Overtime Hours in Manufacturing

Item	Latest Month*	Month Ago	Year Ago	% Yrly Change
Total	78.6	85.7	92.9	-15.4
Hard Goods	70.0	80.0	83.3	-15.9
Ordnance & Accessories	75.9	75.9	72.4	+4.8
Lumber & Wood	93.9	93.9	106.1	-11.5
Furniture & Fixtures	96.4	100.0	125.0	-22.9
Stone, Clay & Glass	88.9	86.1	94.4	-5.8
Primary Metals	46.4	57.1	92.9	-50.1
Fabricated Metal Products	86.7	96.7	96.7	-10.3
Non Electrical Machinery	56.8	62.2	73.0	-22.2
Electrical Machinery	80.8	80.8	96.2	-16.0
Transportation Equipment	103.4	100.0	86.2	+20.0
Instruments	95.7	95.7	108.7	-12.0
Soft Goods	92.0	100.0	108.0	-14.8
Food	103.0	112.1	109.1	-5.6
Tobacco	127.3	127.3	118.2	+7.7
Textile Mill Products	84.6	84.6	123.1	-31.3
Apparel	116.7	108.3	125.0	-6.4
Paper	89.1	95.7	100.0	-10.9
Printing & Publishing	96.9	106.3	100.0	-3.1
Chemicals	104.3	104.3	108.7	-4.0
Petroleum & Coal Products	140.0	110.0	105.0	+33.3
Rubber Products	78.6	83.0	125.0	-37.1
Leather & Products	100.0	85.7	85.7	+16.7

* November is the month for totals and major subtotals. October is the month for individual industry figures.

Lead and Zinc Prices Tumble as Demand Drops

(Continued from page 1)
13¼¢/lb. for dry red lead, 13¼¢/lb. for litharge, and 16¢/lb. for orange mineral.

The ½¢/lb. zinc cut was followed by a similar reduction for pigment grade zinc dust—bringing the new price to 16½¢/lb.

But zinc alloys were cut a deeper ¾¢/lb. The new alloy tags are: 15½¢/lb. for the bellwether No. 3 alloy, 15¼¢/lb. for No. 5 alloy, and 16¢/lb. for No. 2 alloy.

The steep alloy reductions were aimed at ending the widespread discounting that had been going on at the former price levels. Integrated smelters, who kicked off the price cut, feel that reducing the margin between alloy prices and the high grade zinc used by alloy makers will eliminate any room for further tag concessions and thus stabilize alloy prices.

Reasons given for an expected further weakening of zinc prices included:

• **Customer resistance.** "Consumers expect another zinc cut. They'll be buying as little as their inventory needs permit," said one producer.

• **Flagging demand.** "Zinc demand is pretty well tied in with steel. It won't pick up until steel operations do."

• **Smelter pressure.** "Smelters will press for another price cut if demand stays slow," said a mining company official. "It doesn't hurt them because they just lower the price they pay for ore and so keep their spread intact."

For lead, however, the new price promised stability. Many

industry observers hadn't expected any price cut at all, and the steepness of the cut caused general surprise.

But as one integrated mining and smelting company put it, "a half-cent cut doesn't mean anything nowadays. This full-cent reduction should give customers confidence to resume normal buying."

A drop in lead consumption in recent months was pointed to as the main reason for the price cut.

"The feeling spread among customers that a price cut was due," said a mining company

sales executive. "And in the last couple weeks no one was doing any buying."

For both metals the price break, it was generally agreed, stemmed from production running ahead of consumption.

Latest figures show smelter stocks of zinc more than 3% above year-ago levels, while consumer inventories have been pared almost 30% over the same period. The past year in lead saw consumer inventories fall some 20% while stocks in the hands of smelters and refiners rose 37%.

Other recent developments which precipitated the price action were:

• **Improved labor outlook:** The recent settlement of the four month strike at New Jersey Zinc Co. adds a potential 11,000 tons a month to already excessive zinc production. The Bunker Hill Co. strike at Kellogg, Ida., also should be settled soon, with the prospect of an additional 5,000 tons of zinc and 8,000 tons of lead coming onstream each month.

• **Foreign price competition:** Just before the price cuts the London Metal Exchange quotes were 3¼¢/lb. and 3½¢/lb. below the American prices for lead and zinc respectively. Normally the spread between London and domestic tags is 2¢ to 2½¢ in lead and 1¼¢ to 2¢/lb. in zinc.

The unusual price advantage enjoyed by foreign lead and zinc fabricators gave them a competitive edge. When demand is slow, as one executive observed, "Foreign competition can raise hell in American markets even within the import quota restrictions."

Steel Executive Believes Price Hike Improbable

Philadelphia — Although the steel production slump appears to have "about run its course," steel prices have little chance for any substantial increase at present, according to Harleston R. Wood, president of Alan Wood Steel Co.

Wood said last week that he expects production will return to a "normal" operating rate of 75% to 80% by late spring or early summer—with the first signs of a pickup appearing in late winter or early next spring. He based his forecast on a study of the pattern of recent recessions which have been of "about one year's duration."

As for prices, Wood said continuation of the post-war price increase patterns is not possible because of foreign competition, competition from other materials, and general economic conditions.

Antitrusters Lose Fight to Split Up Continental Can, Hazel-Atlas Glass

Washington—Justice Dept. attorneys are wondering how far they can proceed with their ambitious antitrust campaign after a federal judge refused to split up Continental Can Co. and Hazel-Atlas Glass Co. The government had sought to divorce the two companies since they merged in 1956 on the claim that the transaction violated the Clayton Act.

The case against Continental was considered an important one by trustbusters, who feel it provided a test of how far the government could go under Section 7 of the Clayton Act in attacking mergers of companies which make similar, although not identical, products.

Theory Not Rejected

But even though Federal Judge Frederick Vanpelt Bryan ruled against the government and refused to divorce the two companies, Justice Dept. lawyers were somewhat consoled by the judge's comment that he was not disagreeing with the theory of the government's case, but rather with the way it was presented.

Judge Bryan's ruling marked the third government failure to prevent the merger of Continental and Hazel-Atlas. The transaction was made in 1956 as part of a long-range program by Continental to diversify away from the manufacture of cans and get into the broad packaging industry. Hazel-Atlas was a major producer of glass bottles and fitted well into this approach.

Justice, however, attacked the merger on grounds that it violated the broad Clayton Act prohibitions of mergers which tend to lessen competition. The government first charged that the merger violated terms of a consent decree under which Continental had been operating for years. A California federal judge disagreed. Then Justice sought a temporary injunction against consummation of the merger, but was overruled in New York federal court.

Insufficient Evidence

This time around, Judge Bryan ruled that the government failed to produce enough evidence, both "qualitatively and quantitatively," to establish its case. His opinion leaves somewhat unclear where the government stands as to future broad applications of the Clayton Act. Commented one Justice lawyer, "I would think from what he said that it is hard to tell whether we've advanced or receded."

Continental feels Judge Bryan's decision vindicates its four-year fight. The case, according to a Continental lawyer, can have an

Price Cut on Electrodes

New York—Air Reductions Sales Co. has cut the prices of its metal powder stainless steel electrodes more than 20%.

Under the new price scale, Easyarc 308 metal powder electrodes (5/32 in. diameter and 14 in. in length) have been reduced from 98¢ to 78¢/lb. for 250 lb. quantities.

Other reductions: 97¢ to 76¢ for 1,000 lb. quantities; 95¢ to 75¢ for 5,000 lb. quantities, and 95¢ to 74¢ for quantities of 10,000 lbs. and over. Prices are for Zone 1 destinations.

effect on future antitrust action by limiting the government to "strict proof" in Clayton Act anti-merger complaints.

Still pending against Continental is a Justice Dept. suit filed after the company acquired Robert Gair, Inc., a maker of shipping containers and folding cardboard boxes, also in 1956. Judge Bryan said he would first dispose of the Hazel-Atlas complaint before hearing the Gair suit.

Justice Dept. to Eye Mergers of Big Rail Lines

Washington—The Justice Dept. is going to take a look at railroad mergers. The Interstate Commerce Commission, which oversees such matters, says it didn't solicit Justice's advice on the merger problem.

Justice plans to intervene before the ICC when the case of Baltimore & Ohio's acquisition by either Chesapeake & Ohio or New York Central comes up. Both big roads are competing to buy B&O shares. There has been no indication how deeply into railroad economics, and the anti-

trust implications of rail mergers, Justice plans to go. This decision could well depend on how the new Administration feels about such matters.

The Justice Dept. can't attack rail mergers with more power than ordinary citizens. Provisions of the Clayton Act, under which rail antitrust action would likely be taken, clearly spell out that the ICC, not Justice, has the final say on rail mergers. But if Justice objects staunchly enough to any rail merger, the Attorney General could file suit in federal court in

protest, after the ICC approved the merger application.

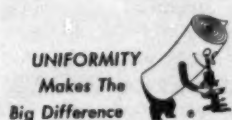
The ICC says it's willing to listen to Justice's opinion, but will give them no more weight than it would other intervenors in the matter.

ICC has in recent years approved several mergers of small roads. But mergers of bigger roads are nearing consummation, and Justice could well be worrying that the ICC is not completely sympathetic with antitrust laws which stress maintenance of competition.



DUCK-TRIMMED DOCK—The Forster Company of Minneapolis, Minnesota, are wholesale distributors of radios, televisions and home appliances throughout Minnesota and parts of Wisconsin. Goods are received by The Forster Company in carload or truckload lots at this Minneapolis warehouse; then redistributed in smaller lots. During the cold winter months, loading dock curtains are a vital factor in maintaining a proper warehouse temperature. In addition, they reduce warehouse heating costs and provide more comfortable working conditions for warehouse employees. Loading dock curtains at this Forster Company warehouse were made by C. J. Hoigaard Company from Mount Vernon duck.

This is another example of how fabrics made by Mount Vernon Mills, Inc. and the industries they serve, are serving America. Mount Vernon engineers and its laboratory facilities are available to help you in the development of any new fabric or in the application of those already available.



Mount Vernon Mills, inc.
A LEADER IN INDUSTRIAL TEXTILES



Main Office and Foreign Division: 40 Worth Street, New York, N. Y.
Branch Offices: Chicago • Atlanta • Baltimore • Boston • Los Angeles

MOUNT VERNON MILLS, INC. PRODUCES A WIDE RANGE OF FABRICS IN THESE CATEGORIES: Army duck, ounce duck, wide duck, drills, twills, osnaburgs and sateens • Fabrics used by the canvas goods manufacturing industry • Hose duck, belt duck, chafer fabrics and other special fabrics for the rubber industry • Laminating fabrics and special constructions for the plastics industry • Ironing machine aprons and cover cloths for the laundry industry • Special fabrics for the coating industry • Standard constructions and specialties for the shoe, rug and carpet industries • Dryer felts for paper making, aprons for harvesting machines • Mop yarns and drapery fabrics • Work clothing fabrics for industry • Fabrics for U. S. Army and Navy • Specification fabrics for industry generally.

New Jersey Revamps Drug Purchasing Program

Trenton—New Jersey has revised its drug purchasing program to insure that pharmaceuticals and allied items are purchased by generic rather than brand names. The new system is expected to save the state more than \$50,000 annually.

The program resulted from a four-month study of drug purchasing practices by a joint committee representing the Division of Purchase and Property and the Department of Institutions and Agencies. The committee's findings proved New Jersey's drug purchasing program was in need of drastic revision, said Charles F. Sullivan, Director of the Division of Purchase and Property.

What the Study Showed

The study showed, among other things, that:

- Different state institutions were paying a wide range of prices for the same basic drug from various suppliers.
- Relative prices paid for par-

ticular drugs were highest in institutions that specified particular brand names.

- Some institutions were buying products for which the state had direct purchase contracts.

- Institutions were honoring bills that did not list units or give individual prices for separate items.

- Some institutions were far off base in anticipating usage of certain standard products.

As a result of the study, the committee worked out a new system for purchasing generic and

quantity drug items. Details included:

- (1) Inviting bids from vendors who had supplied one or more institutions satisfactorily in the past.

- (2) Substituting generic names for brand names where practical.

- (3) Drawing up a master list of 128 most commonly used items and uniform prices for all institutions.

- (4) Removing sole source items from the general bid and sending orders as a unit to vendors involved.

Dow Boosts Prices for Chemicals Used to Manufacture Epoxy Resins

Midland, Mich.—Dow Chemical Co. has announced price increases ranging from 1¢ to 1½¢/lb. on Bisphenol A and Bisphenol 44. These two chemical products are used widely as intermediates in the manufacture of epoxy resins.

The increases were made effective Dec. 15 for spot customers and Jan. 1 for contract users. Both products will go up to 1¢/lb. for truckload and carload quantities. LCL carload

quantities were increased 1½¢/lb.

Dow said the increases were made necessary because of higher costs of raw materials and labor. The new schedules bring the basic quantity prices for Bisphenol A to 30½¢/lb. and Bisphenol 44 to 33½¢/lb.

In addition to its epoxy resin applications, Bisphenol also is used as an antioxidant or color stabilizer in rubber, brake fluid, and soap formulations.

Michigan Investigates State Trucking Tariffs

Lansing, Mich.—New truck tariff rates for the state may emerge from a study of Michigan trucking costs now underway.

The study, undertaken by A. T. Kearney & Co., Chicago management consultants, at the request of the Michigan Public Service Commission, shows these preliminary findings:

- A 700 lb. shipment of general merchandise moving from Grand Rapids to Detroit, consisting of 14 separate pieces and having a density of 15 lb., would cost \$1.41/per 100 lb.

Cost break down per 100 lb. look like this: line haul costs based on a 25,000 lb. load factor—18¢; terminal costs based on weight, density and pieces—51¢; destination terminal costs—72¢.

- Another example cited in the preliminary study: \$1.31/100 lb. for a 30,000 lb. haul from Detroit to Flint.

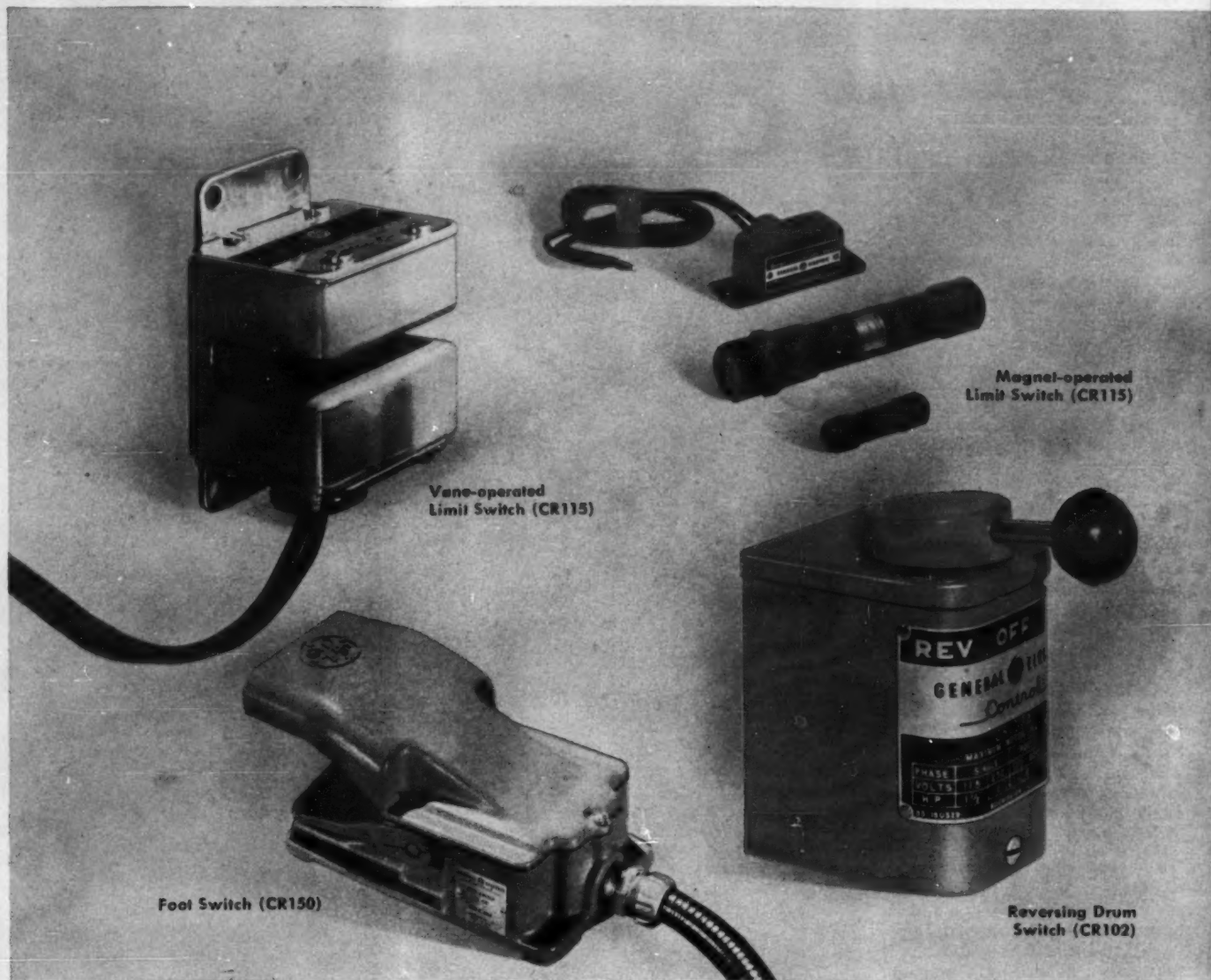
These figures included factors involved in pickup, delivery and long haul operations

Eight Factors

Kearney's specialists set down eight factors to determine the cost of any shipment within the state:

1. Characteristics of pickup and delivery cities—including size, population, area, traffic conditions, geographical conditions.
2. Length of the haul.
3. Density of freight pounds per cubic foot.
4. Number of individual pieces in the shipment.
5. Average load factors: the size load that can be taken on a specific haul and the volume of freight to destination during normal times
6. Weight of shipment.
7. Shape or size of shipment.
8. Susceptibility to claims through breakage or theft.

Figures for the study were assembled from studies of 40 primary and secondary carriers who perform 90% of common carrier truck transportation in the lower peninsula and handle more than 60% of the state's freight.



AVAILABLE NOW . . . More Measurable Advantages From General Electric Control:

In 1960 Alone . . . 9 NEW Devices

Progress at General Electric's Control Department means important benefits for you—distinct and valuable advantages that can be

measured in terms of time and money in your own operation. We invite you to evaluate these benefits for yourself.

NEW VANE-OPERATED LIMIT SWITCH (CR115) gives from 30 to 50 million operations! Performs position-detection function of conventional switches without physical contact by passing a vane through a slot. The vane magnetically operates a contact. Switch is encapsulated to seal out contaminants. Bulletin GEA-6995.

NEW MAGNET-OPERATED LIMIT SWITCH (CR115 A19) eliminates physical contact with levers, arms, rods, or shafts. Performs position-detection function where precise control of moving object is not possible or where there is no

opportunity to run a vane through a slot. Detects erratic motion on such applications as overhead conveyors. Oil-, dust-, and water-tight. Bulletin GEA-7305.

NEW FOOT SWITCH (CR150) offers rugged, cast-iron construction—will not skid during operation. Water-, oil-, and dust-tight switch is available in single- or two-stage forms with or without guard. Bulletin GEA-7086.

NEW REVERSING DRUM SWITCH (CR102) can be changed from maintained to momentary contact in seconds—without

tools! Gives exceptional durability, positive "feel." Easy to wire and install. Bulletin GEA-7000.

NEW MINIATURE OIL-TIGHT PUSH BUTTONS (CR104) cut your panel space requirements at least 40 percent. Complete new line offers buttons, selector switches, illuminated buttons and indicating lights. Color coding available in both rings and buttons. Bulletin GEA-7127.

NEW WYE-DELTA REDUCED VOLTAGE STARTERS (CR132, CR7053) provide low inrush current resulting in low starting

Bell Cuts Copter Prices

Fort Worth—Bell Helicopter Co. announced that it will reduce prices of its three commercial models in 1961.

Bell said that "standardization of all three models by designing for maximum interchangeability of components and rigid cost controls" made possible the reduction in spite of increasing labor and material costs.

Bell's three-place models, the 47G-2A and 47G-3, will be reduced by \$550 to below \$40,000. Its four-place model, the 47J-2, will sell for below \$70,000, a reduction of about \$2,500 it was reported.



DO-IT-YOURSELF TRUCK INSULATION: New urethane foam panels by Urefoam Corp., Camden, N. J., have plywood base, aluminum foil back; can be fabricated with ordinary tools (left); installed easily (right).

Santa Fe Courts Businessmen in Bid To Obtain Control of Western Pacific

Salt Lake City—The Santa Fe Railroad has begun wooing Western businessmen in its bid to gain control of the Western Pacific.

The move follows closely on the heels of an appeal to shippers from the Southern Pacific Railroad, another contender, for the line which links the Mississippi and San Francisco areas (see PW, Dec. 5, '60, p. 8).

Speaking before the Chamber of Commerce here, the Santa Fe's general attorney, Robert Walker,

promised that the railroad would maintain the Western Pacific as a separate and competitive line if the proposed purchase is approved by the ICC. He said this would not be true if the Southern Pacific won out.

"Irrespective of claims to the contrary, however well intentioned, is it reasonable to believe in the light of history and self-interest, that the SP would continue the Western Pacific as an aggressive competitor of itself?" Walker asked.

In its ICC application, the Santa Fe emphasized that the interest of WP and Santa Fe employees would not be adversely affected and that the communities and shippers would benefit from improved service. Western Pacific has endorsed the Santa Fe proposal.

In a bid for active shipper support, Walker said, "We ask for the active support of the public in expressing itself on this issue. The SP in many areas has approached public bodies and asked for neutrality. A neutral attitude favors the claim that rail competition with the SP is unnecessary. We feel you cannot afford this price of neutrality."

Braniff Airways Begins Daily All-Cargo Flights Between N.Y. and Dallas

Dallas—Braniff International Airways has expanded its cargo service to provide a daily all-cargo flight between Dallas and New York.

The service uses a 300 mph DC-6A air freighter designed to carry 13 tons of air express, air freight, and air mail.

Rex Brack, vice president, said that Braniff's reserved air freight service, used to insure specific deliveries on many passenger flights will be available in expanded form on the new Dallas-New York cargo runs.

Flight 800 will depart Dallas Monday through Friday at 8 a.m. CST, and arrive at Newark at 1:50 p.m. EST. Flight 801 will leave Newark Monday through Friday at 12:30 a.m. EST and arrive at Dallas at 5:10 a.m. CST.

Leasing Plan Set Up For Prefab Buildings

Chicago — Prefabricated steel buildings have joined the growing list of industrial products available through leasing programs.

Inland Steel Co. has disclosed a new equipment leasing plan under which customers of its subsidiary, Inland Steel Product Co., can rent steel structures for use as hangars, warehouses, and grain storage bins.

Talcott Leasing Corp., a subsidiary of James Talcott, Inc., will supervise the program. Under the plan, Talcott will purchase the building or buildings from Inland and lease them to the industrial user directly. At the end of the lease period, the user may continue to rent the buildings at an annual rental or purchase them outright.

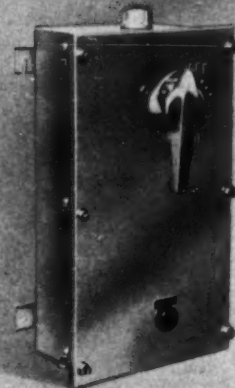
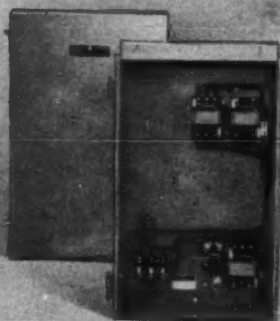
You get MEASURABLE ADVANTAGES WITH GENERAL ELECTRIC CONTROL



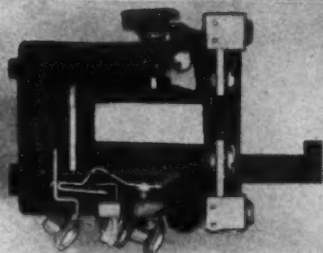
Miniature Oil-tight Push Buttons (CR104)



Wye-delta Reduced Voltage Starters (CR132, CR7053)



Stainless Steel Starter Enclosures (CR107, CR108, CR1062, CR7008)



NO-NC Overload Relay (CR124)



Pressure Switch (CR127)

Longer Life, Space Savings, Increased Flexibility, Better Protection

for Better Control in Your Plant

torque. Two types are available: Open transition, which is particularly suitable for long-time acceleration; and closed transition (auto transformer) which minimizes current or torque dips. Bulletin GEA-6860.

NEW STAINLESS STEEL STARTER ENCLOSURES (CR107, CR108, CR1062, CR7008) for use where corrosion is a problem—give neat appearance, match other equipment. Switch handles are chromium-plated; hardware and mounting feet, stainless steel. Enclosures provide watertight protection. A complete line of enclosures is available for manual and magnetic across-the-line starters.

NEW NO-NC OVERLOAD RELAY (CR124), a two-circuit relay for use with signal-

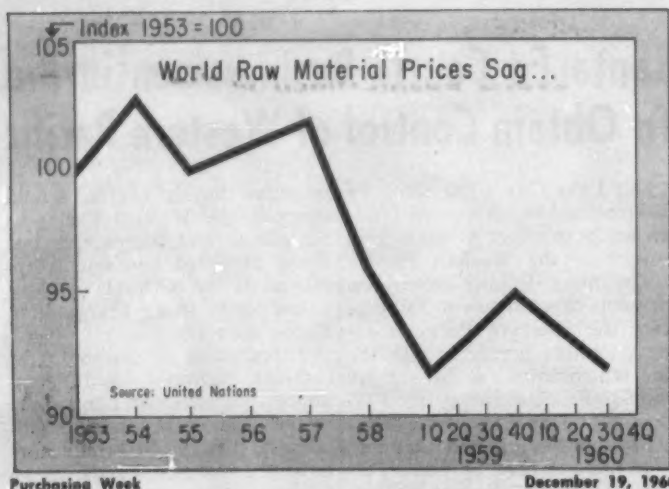
ling devices such as indicating lights or alarm bells, assures positive visible or audible overload detection.

NEW PRESSURE SWITCH (CR127) features visible trip indicator and calibrated range scale in cover. Unique neon pilot light indicator is optional. Low- and high-pressure forms are available in both bellows or piston types. Bulletin GEA-7302.

For more information on the measurable advantages of these new General Electric control devices, contact your G-E Apparatus Sales Office or Authorized Distributor or write to Section 813-27, General Electric Co., Schenectady 5, N. Y. for the bulletins listed.

Progress Is Our Most Important Product

GENERAL ELECTRIC



World-Wide Glut in Raw Materials

New York—The major raw materials producing nations—worried by falling prices brought on by global gluts in a wide range of commodities—are once more eyeing various stabilization schemes that could restore some semblance of balance between supply and demand.

Prodding them into action is the fear that with the major consuming nations in a recessionary period, another drop in demand could spark drastic price breaks—particularly in nonferrous met-

als, oil, pulp, rubber, and textiles. Coming on top of several years of declining prices, any big price breaks could have a disastrous effect on the economies of the raw materials countries.

A look at the world primary price trend for the past few years shows how hard these nations have been hit. Since 1957, for example, the United Nations estimates that the world raw material price level declined by some 10% (see chart, left).

The drop on the sensitive Lon-

don market has been even more precipitous. In the past year alone, Reuters United Kingdom Price Index, similar in makeup to PURCHASING WEEK's sensitive commodity index, has tumbled by almost 5%.

Here's a rundown on how some of the major materials now shape up:

• **Rubber:** The growth in synthetic rubber consumption has transformed natural rubber into a surplus commodity; less than six months ago it was in tight supply.

Result: Natural rubber prices have slid from 47.2¢/lb. at the end of June to about 28½¢/lb. current quotations—a 40% drop.

And the end is not yet in sight. Synthetic rubber production is running 10% ahead of consumption (see chart, right). More important, 165,000 tons of additional capacity in new natural-synthetic—the type most directly competing with natural—is scheduled to come onstream in 1961; and Malaya has launched an extensive tree replanting program to increase rubber acreage yields.

• **Cotton and Wool:** Cotton and wool are still plagued by surpluses, even though production is down slightly for both commodities—2% and 1% respectively—compared to last year.

The textile boom that sparked the demand for these raw materials is now history—and prices continue to drift downward. Cotton has dropped to 32.3¢/lb. from a June high of 34.3¢, and wool to \$1.47/lb. from its January top of \$1.60.

• **Chemicals:** Even stepped-up demand can't keep pace with the increasing production of some chemicals. In polyethylene, for example, a growing world surplus lowered American prices 5¢/lb. in September and English tags 4.7¢/lb. in late November.

Oversupply is also paring prices for crude glycerin and casein, despite good demand. And where demand is sluggish—as in mercury—the price drop has been steep and protracted.

• **Lumber and pulp:** Here again it's the same story—high stocks and falling prices. Lumber tags have fallen anywhere from 6% to 14% over the year, and pulp isn't doing much better.

In pulp the surplus appeared fairly recently. Last summer, for example, exported American pulp was bringing good prices in Europe, but late in the third quarter foreign demand began to flag. This was one of the factors which caused pulp producers in the U. S. and British Columbia to cut their prices from \$10 to \$15 ton last month.

• **Oil:** Overcapacity plus competition from gas and coal has created an alarming world surplus in oil. Prices on the world market were cut 6% in August, but so far import quotas have cushioned the shock effect of this glut on domestic prices.

• **Copper:** Stocks are beginning to pile up in Europe, and the U. S. has been saturated since the middle of the year. With consumption estimated at 3.1-mil-



Arthur Graham, Director of Purchasing, Arvin Industries Inc., shown with an Arvin muffler.

"When I buy supplies...
I look for **COMPLETE COOPERATION**"

...says Mr. Arthur Graham, Director of Purchasing of Arvin Industries Inc., shown with an Arvin muffler. "With our broad line of products sold in highly competitive markets, we need the full attention of suppliers who can contribute engineering service, unvarying high quality and prompt delivery. The complete cooperation we get from Mallory is an important factor in their more than 25 years of working with us."

P. R. MALLORY & CO. Inc.
MALLORY
P. R. MALLORY & CO. Inc., INDIANAPOLIS 6, INDIANA

See MALLORY for:

- Dry Battery Systems
- Capacitors
- Controls
- Silicon Rectifiers
- Timer Switches
- Vibrators
- Contacts
- Special Metals
- Electronic Assemblies
- Welding Materials

Brings Cry for Commodity Controls

lion tons a year and production running at a 3.5-million—slightly under the 3.8-million ton mining capacity—the situation is expected to get a lot worse before it gets better.

• **Foods:** Perhaps the most widespread pileup is occurring in the food area. Coffee production for example, is running some 50% ahead of consumption, with prices tumbling as much as 20%.

The situation is even worse with wheat. Free world stocks now stand at a record 2.1-billion bu. For the U.S. alone wheat storage costs amount to \$200-million a year, and since federal price support programs keep domestic tags far above world prices, the government has to pay subsidies of 52¢ to 64¢/bushel to permit U.S. wheat exporters to compete in foreign markets.

Surplus in sugar has caused the International Sugar Council to cut export quotas for its member nations by 15%. Excessive cocoa supplies have driven cocoa prices down 13% over the past year.

The above surpluses are by no means an exhaustive listing. Zinc is in excess supply; aluminum production is running some 16% under capacity (see chart, right). And falling prices for foreign steel may indicate that a world surplus in this all-important item is in the offing. This could also mean that coal—already overabundant in the U.S.—is about to join the list of materials that are in world oversupply.

What's behind these surpluses?

One answer can be found in the rapid postwar upsurge of the underdeveloped nations. These nations, in an effort to raise their standard of living, have been going all out to boost output of what they can produce best—mainly raw materials.

Aided by cheap labor and rich natural resources, they have found it relatively easy to break into world markets. The resulting impact on commodity prices has been staggering. Despite general world inflation, the price of raw materials today is actually below the levels of a decade ago.

Productivity is another factor

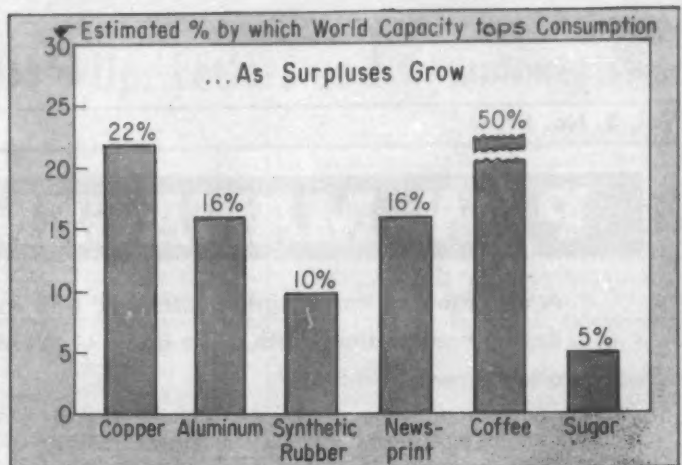
behind current material price easiness. The introduction of modern equipment and machinery into the most backward economies has resulted in phenomenal rise in output per manhour.

This is especially true in food production. In backward countries, where the opportunities for mechanization are great, yearly food productivity jumps of 10% or more per year are not uncommon.

Productivity rises have been substantial even in the advanced

industrial nations. The U.S., a leader in modern technology, has been able to boost its farm output per manhour by an average 6%/yr. in the postwar period.

Overseas investment has sparked much of the growth that has occurred in the backward areas of the world. It's doubtful that any of the underdeveloped nations could have come up as fast as they did if it hadn't been for the billions poured into their economies by American and West European investors.



Purchasing Week

December 19, 1960



PROOF-OF-PURCHASE COUPONS ON HARD-TO-LABEL SURFACES

are both pilfer-proof
and easy to clip...

... with Dennison PRES-a-ply® Labels
stripe-gummed with permanent adhesive!

That's why several Charles Antell Hair Care Products were able to participate in a highly successful premium promotion with all other B.T. Babbitt Inc. products. The problem was to attach pilfer-proof evidence of purchase to polyethylene and silicone-treated bottles... two hard-to-label surfaces.

Protection against coupon pilferage, comparable with that provided by wrap-around labels, is now easy to get with Dennison PRES-a-ply labels, gummed only at the ends with permanent pressure-sensitive adhesive. They are speedily and economically applied on the production line to lacquered, metal, silicone-treated and other moisture-resistant surfaces with the aid of low-cost, automatic Dennison PRES-a-ply Label Dispensers.

Whether your products are packaged in bottles, film, foil or paper, Dennison can help you tailor your labels to any promotional or informative task. That's because Dennison makes labels with all kinds of gumming: pressure-sensitive, water-moistenable and heat-seal... for either permanent or peelable adhesion. Experience in designing and producing labels for America's leading merchandisers has also created a pool of ideas on which you can freely draw.

Add extra value to your next labels... idea-wise, quality-wise, cost-wise... by adding Dennison to your merchandising team. Creative suggestions and cost quotations are yours for the asking.

Federal Agency Predicts Rise in Hide Production

Washington—Greater domestic hide and skin production, along with a continued downward trend in prices, is anticipated for 1961. The Business and Defense Services Administration of the Commerce Dept. says exports probably will increase but imports will remain about the same.

As a result of high prices in the first half of 1959, the domestic market for cattle hides, and to a lesser extent for calf skins, has declined. Heavy leather produced from these hides and skins has been replaced by other products. The government report says this business may not be entirely recaptured.

Prices were down 15% to 35% on cattle hides in the first 10 months of this year, and the report expects this trend to continue. A reasonable estimate is that 1961 cattle slaughter will be up 10%, calf slaughter up 5%, and sheep and lamb slaughter will remain about the same.

Dennison

FRAMINGHAM, MASSACHUSETTS

Helping you compete more effectively



Audit Bureau
of
Circulations

Purchasing Week

Associated
Business
Publications



Vol. 3, No. 51

December 19, 1960

Print Order This Issue 26,704

P/W MANAGEMENT MEMOS

A collection of timely tips, quotations, and inside slants on management and industrial developments, along with a run-down of events and trends of use to the purchasing agent.

Depreciation Break

Many business groups are pressuring the incoming Kennedy Administration for more liberal depreciation allowances. They hope for faster tax write-offs, higher depreciation rates and shorter required "lives" for new tools as a means of stimulating capital investment.

In a recent survey of 30,000 businessmen, the Tax Research Institute of America found that 62% of the respondents said they would expand present facilities if given a better depreciation tax break. Fifty-five percent said that present depreciation rules are unsatisfactory.

Among the major complaints was that inflation consumes the equipment replacement funds that depreciation allowances create. Businessmen also felt that "schedule F"—the official list of capital equipment lives issued in depreciation calculations—is out of date. Tax reform is another hot topic. The Investment Bankers Assn. recently noted benefits that can be obtained through more liberal depreciation rules. The association pointed to the accomplishments of post-war Germany in this respect.

Said the committee: "A major factor in the German industrial progress has been the freedom that corporations have enjoyed in charging depreciation reserves to earnings as they saw fit. This has provided at one time both the incentive to build new and efficient plants and a large part of the means of financing it."

How to Use the Telephone

According to speech therapist Paul Mills, the telephone is the most misused piece of equipment at management's disposal.

In a 32-page book on how to use the telephone effectively—titled "Speak Well—Sell Well"—Mills stresses the point that you are selling something (yourself) everytime you pick up the instrument.

A number of top companies—among them ESSO, (Standard Oil, N. J.) West Virginia Pulp & Paper, Continental Can—are circulating copies through their departments in the hope that some of Mills' pointers will take root. Copies are available from: Paul Mills, 17 E. 48th St., New York 17, N. Y. Price is \$1.00 per copy, but quantity discounts are offered to companies that want to pass copies for each of their top managers.

International Business Arbitration

The U. S., Russia, and other nations have agreed to settle business disputes by commercial arbitration under auspices of the U.N. This quiet, unspectacular step toward international togetherness will help buyers get out of legal entanglements in foreign countries.

Commercial arbitration is the settlement of business disputes with the assistance of an unbiased third party—without resort to court proceedings. It's quicker and less costly than long legal tangles and so has found favor with growing numbers of businessmen in this country. The method is advocated by the American Arbitration Assn. whose case histories periodically appear on the pages of PURCHASING WEEK.

The U. S. Council of the International Chamber of Commerce has urged that the U. S. participate in the U.N. Convention on Commercial Arbitration. One reason, noted by the Chamber, is that international legal disputes are very difficult to settle in the courts. Arbitration could cut short the multilingual legal harangues that often are mentioned as a major headache by P.A.'s who buy materials abroad.

Among nations that have agreed to accept arbitration of commercial disputes are Russia, France, India, Israel, Morocco, United Arab Republic, Czechoslovakia, and Thailand.

Tax Guide

The Internal Revenue Service has reissued its "Tax Guide for Small Business," a 144-page paperback that answers most of the tax questions that bother small businessmen. P.A.'s struggling with the mysteries of inventory and property taxes, sales taxes, duties and tariffs, and federal and state corporate taxes, will find many helpful pointers here. For copies (40¢ each) write: Supt. of Documents, Government Printing Office, Washington 25, D.C.

Short Pointer

The Bureau of Budget is urging government people to go economy class when they fly anywhere on official business. At the same time, the airlines announced they are installing wider seats (19.5 in. to 21 in.) in their tourist sections. Although it's probably just plain coincidence, both moves seem to be neatly timed to complement each other.

PUBLISHER Charles S. Mill
EDITOR Edgar A. Grunwald
Managing Editor John M. Roach

News:

Peter D. Rankin, Ira P. Schneiderman
Kathleen G. Haase

Price Trends:

Robert S. Reichard . . . SENIOR EDITOR
Dan Balaban

Products:

David Bressen SENIOR EDITOR
Thomas C. Hunter

Management:

William R. Leitch . . . SENIOR EDITOR
Domenica Mortati, Gerald M. Walker

Presentation:

Samuel Cummings, Allen C. Hoffman,
James P. Morgan, Gail Gruner, Kendra Jenks

Consulting Editors:

George S. Brady (Materials), F. Albert
Hayes (Purchasing Methods), Robert
C. Kelley (Purchasing Practice),
Martin L. Leibowitz (Operations
Research), John M. Owen, Jr. (Strategy
Games, Purchasing Theory)
Sydney Prerau (Law, Taxes)

McGraw-Hill Economics Staff:

Douglas Greenwald . . MGR. ECONOMIC
SERVICES

Alfred Litwak

Dexter M. Keezer, Economic Advisor

McGraw-Hill News Bureau:

John Wilhelm DIRECTOR
Margaret Ralston . . MANAGING EDITOR

Washington:

George B. Bryant, Jr. CHIEF
Glen Bayless, Donald O. Loomis, Alan
Adams, Herbert Cheshire, John
Donaldson, Arthur Moore, Morton
Reichek

Bureau Offices:

Billy E. Barnes, Atlanta; Stewart W.
Ramsey, Chicago; Arthur Zimmerman,
Cleveland; Marvin Reed, Dallas;
Donald MacDonald, Detroit; Kemp
Anderson, Los Angeles; Jenness
Keene, San Francisco; Ray Bloomberg,
Seattle; Omnie M. Marashian, Beirut;
Morrie Helitzer Bonn; John Pearson,
Caracas; John Shinn, London; Peter
Weaver, Mexico City; Ernest Conine,
Moscow; Robert E. Farrell, Paris;
Leslie Warren, Rio De Janeiro; Sol
Sanders, Tokyo

Assistant to the Publisher:

Raymond W. Barnett

Marketing Services Manager:

E. J. Macaulay

Business Manager:

L. W. Nelson

PURCHASING WEEK is published weekly by McGraw-Hill Publishing Company, Inc. Founder: James H. McGraw (1860-1948).

SUBSCRIPTION PRICE: Available only by paid subscription. Publisher reserves the right to refuse nonqualified subscriptions. Subscriptions to Purchasing Week solicited only from purchasing executives in industry, business, and government. Position and company connection must be indicated on subscription orders forwarded to address shown in box below. U. S. Subscription rate for individuals in the field of the publication \$6 a year; single copies 50 cents. Foreign rates on request.

EXECUTIVE, EDITORIAL, CIRCULATION, AND ADVERTISING OFFICES: McGraw-Hill Building, 330 West 42nd Street, New York 36, N. Y. Telephone: LOngacre 4-3000. Teletype: TWX N. Y. 1-1636. Cable Address: MCGRAWHILL, N. Y.

Printed in Albany, N. Y.; second-class mail postage paid at Albany, N. Y. Title © reg. in U. S. Patent Office. © Copyrighted 1960 by McGraw-Hill Publishing Co., Inc. Quotations on bulk reprints of articles available on request. All rights reserved, including the rights to reproduce the contents of this publication in whole or in part.

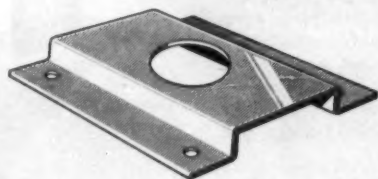
OFFICERS OF THE PUBLICATIONS DIVISION: Nelson L. Bond, President; Shelton Fisher, Wallace F. Traendly, Senior Vice Presidents; John R. Callahan, Vice President and Editorial Director; Joseph H. Allen, Vice President and Director of Advertising Sales; A. R. Venezian, Vice President and Circulation Coordinator.

OFFICERS OF THE CORPORATION: Donald C. McGraw, President; Joseph A. Gerardi, Hugh J. Kelly, Harry L. Waddell, Executive Vice Presidents; L. Keith Goodrich, Vice President and Treasurer; John J. Cooke, Secretary.

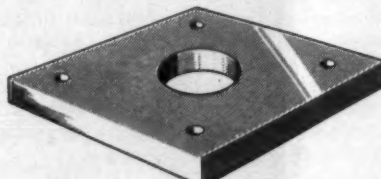
UNCONDITIONAL GUARANTEE—We agree upon direct request from paid-up subscribers to our New York Office, to cancel any subscription if PURCHASING WEEK'S editorial service is unsatisfactory. The proportionate subscription price of any unmailed copies will be refunded.

SUBSCRIPTIONS: Send subscription correspondence and change of address to Fulfillment Manager, Purchasing Week, 330 West 42nd St., New York 36, N. Y. Change of address should be sent promptly, giving old as well as new address and including postal zone, number, if any. If possible enclose an address label from a recent issue of the publication. Please allow one month for change to become effective.

WHAT VALUE ANALYSIS CAN DO FOR YOU



BEFORE ANALYSIS: Cylinder cap for diesel-electric locomotive was machined from steel plate. Operations: sheering, drilling, milling.



AFTER ANALYSIS: Part was made in a single step as a steel stamping. All machining eliminated.

TECHNIQUE:

Investigate cost of making simple parts as stampings.

SAVINGS:

Part Cost Cut 66%
(53¢ to 18¢)

Source: Locomotive & Car Equipment Dept. General Electric Co.

What specific advantages have you gained from visits to suppliers' plants?



D. C. Boe, purchasing agent, Multi-Clean Products, Inc., St. Paul, Minn.:

"This is the best device we know of to get acquainted with a supplier's facilities, systems, and people. Knowing a vendor's system of processing a purchase order, and the people involved, we find it much easier to place successful rush orders and expedite them. On a first visit to an established supplier we often discover he has additional products or services we can utilize. During a recent visit we found one of our stamping vendors was also making higher quality tubular parts; by working with him on our tubular needs we wiped out a quality problem that had plagued us for two years."



W. F. Carswell, purchasing agent, Monarch Construction Ltd., Toronto, Ont.:

"I would list these: (1) A more thorough knowledge of supplier's manufacturing process and, therefore, a better understanding between purchasing agent and supplier. (2) Opportunity to check manufacturer's quality control system and get an idea of plant capacity. (3) Chance to make personal contacts with production people for help in the future. In addition, I like to check warehousing and inventory facilities of standard items and also obtain an idea of difficulties involved for a non-standard item. I also find that a few words with the individuals in packaging and shipping can sometimes improve quality of the delivered end product."



J. M. Berry, vice president, Kennedy Tank & Mfg. Co., Inc., Indianapolis:

"We believe it helps us to personally know the individuals handling our account. It helps us to know their problems and them to know ours. On a visit to an electrode supplier's plant, for example, we picked up an idea on the storage of electrodes that has been helpful in reducing waste and loss in the handling of our electrodes. In our business this is a very large item."



D. W. Nida, plant purchasing agent, Royal McBee Corp., Springfield, Mo.:

"There are three: (1) Plant visitation enables me to better evaluate vendor capabilities by seeing their facilities and production equipment. We can fully discuss our requirements and through such discussion suggest a mutually beneficial change in specification to our production engineering. (2) By meeting people who actually handle our requirements, I find we get better attention and in turn have a better appreciation of vendor problems. (3) Knowledge gained by visitation better equips the buyer to negotiate—you always gain some information in seeing the product produced."



R. H. Kusserow, works manager, Koehring-Waterous Ltd. (cranes, shovels & cement machinery, etc.), Brantford, Ont.:

"When phoning a vendor, that personal feeling of knowing the individual can mean a lot toward getting results and eliminating delays in contacting the wrong man. While visiting, the purchasing agent can discuss problems he may be having with quality, scheduling, pricing, etc., and mutually agree on how to solve them. It gives him an idea of the vendor's capacity so that in times of increased demands, he can decide whether additional suppliers are needed to meet delivery requirements. He may also learn of other products he can use."

NEXT WEEK—DECEMBER 26

Six purchasing men answer this question:

How much of a price differential must there usually have to be before you would consider changing a source of supply on the basis of price alone?

You can suggest a question to be answered in this department by writing:

PURCHASING WEEK Asks
330 West 42nd St.
New York 36, N. Y.

Follow-Up: Letters and Comments

Purchasing and Profits

New Delhi, India

I saw a very interesting article in your July 25 PURCHASING WEEK, "How the P.A. Can Make a Company's Profits Zoom Without Risks That Accompany a Big Sales Push" (p. 30) by Albert Hayes.

This is one of the best graphic illustrations that purchasing is a profitmaking and not a clerical function and that by purchasing efficiently savings can be made without risk and capital investment, etc.

Could you send me six copies?

K. C. Sawhney

Purchase Secretary
DCM Chemical Works

Article on Wages

Lansing, Mich.

In a recent issue, perhaps in late October or early November, you published an article regarding wages.

According to this article, this country

is not pricing itself out of the world market as wages are rising rapidly in other countries as well.

The article was reviewed on the nightly business news program of station WWJ, the Detroit News, around November 5.

Could you help us locate the article?

Mrs. Gilson R. Pearsall

Dept. of Economic Development
State of Michigan

● The report, "Export Pace Shows U. S. Prices Aren't Prohibitive," appeared in our Oct. 31 issue, p. 8.

To Our Readers

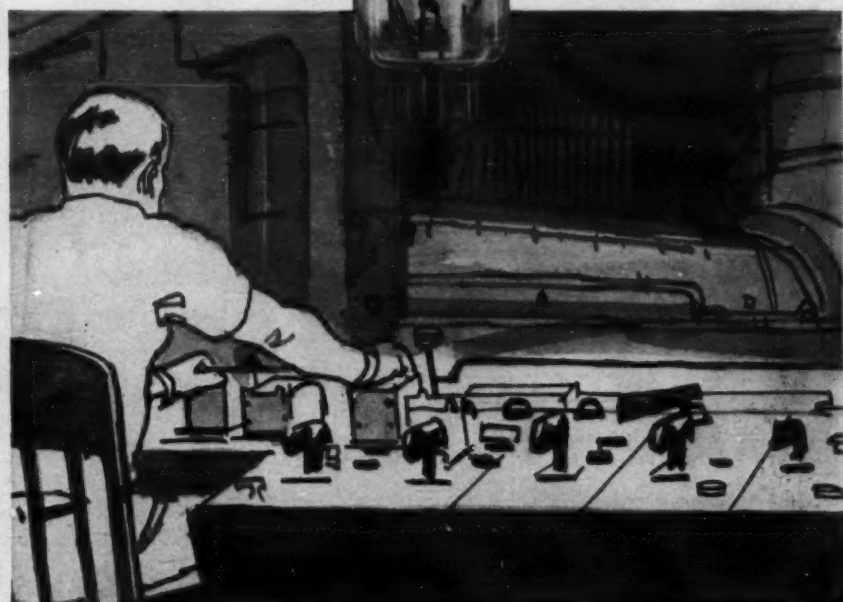
This is your column. Write on any subject you think will interest purchasing executives. While your letters should be signed, if you prefer we'll publish them anonymously.

Send your letters to: "Follow-Up," PURCHASING WEEK, 330 West 42nd St., New York 36, N. Y.

SYLVANIA INDUSTRIAL TUBES



take the loads reliably



Sylvania Industrial Electronic Tubes prove their ability daily to take widely varying load conditions. Vibration? Shock? They're built to take that, too.

Next time you need replacement tubes see your *Sylvania Industrial Tube Distributor*. Smarter yet, see him today and have your replacements on hand. He carries the full line of Sylvania Industrial Tubes for resistance welding, electronic control, induction heating and dielectric heating equipment.

You'll like the high-quality product he sells. You'll value his service, the kind of service that means more hours of continuous production.

Meet your SYLVANIA INDUSTRIAL TUBE DISTRIBUTOR. Ask him for the new "Sylvania Industrial Tubes" and "Gold Brand Reliable Tubes" booklets. Or write Electronic Tubes Division, Sylvania Electric Products Inc., Dept. 4612, 1100 Main Street, Buffalo, New York.

SYLVANIA

Subsidiary of GENERAL TELEPHONE & ELECTRONICS

This Changing Purchasing Profession . . .

Irving Williams, formerly purchasing agent at the Caribe Hilton, San Juan, Puerto Rico, is now purchasing agent at the Jack Tar Hotel, San Francisco.

D. M. Pierson was made manager of materials at Acoustica Associates Inc., Los Angeles, in a reorganization of the company's purchasing department. W. R. Johnson has been named senior buyer and in this capacity will serve as Pierson's assistant. Pierson had been manager of contracts and Johnson was formerly with Applied Communications Systems.

Douglas L. Heisler joined Vickers Inc., division of Sperry Rand Corp., Detroit, as director of purchasing. He had been corporate procurement manager of Whirlpool Corp., St. Joseph, Mich.

T. R. Spidel has been appointed an assistant on the staff of the vice president, purchasing, J. I. Case Co., Racine, Wis. His responsibilities will include basic technical problems on materials and parts for the purpose of value analysis and standardization.



D. L. HEISLER T. R. SPIDEL

George Ditchfield, a past president of the Purchasing Agents Assn. of Central Ontario, has been appointed to the field sales staff, central Ontario district, Leland Electric Co., Ltd., Guelph, Ont.

Ralph A. Steude was elevated to director of purchases, Electric Autolite Co.'s battery-group central offices, Toledo. He had been assistant director of purchases for the battery group.

George Crone has taken the post of purchasing agent with Denison-Johnson, Inc., Mankato, Minn. He formerly was buyer for the Franklin Mfg. Co., Minneapolis.

Benjamin H. Pritchard and William B. Seemann have been promoted from buyer group leaders to assistant purchasing agents by Youngstown Sheet & Tube Co., Youngstown, Ohio.

William R. Stenner joined Vocaline Co. of America, Old Saybrook, Conn., as purchasing agent. He had been assistant purchasing agent for Casco Products, Inc., Bridgeport, Conn.

Adam Kubinciak, former administrative assistant to the president, Dynamic Gear Co., Amityville, N. Y., was made purchasing agent.

Ellis J. Powell has been promoted from assistant purchasing agent to purchasing agent Federal Reserve Bank of Cleveland. He succeeds the late Howard M. Hendrickson.

William Smith, purchasing agent of Illumitronic Engineering, Sunnyvale, Calif., has been made general manager of the firm.

Byron Heiserman was advanced from supply and communications supervisor (west central) to senior buyer, State Farm Insurance Group, Bloomington, Ill.

Norman R. Cameron has been appointed vice president and purchasing director, Electronic Expeditors, Inc., Milwaukee.

NAPA District 4 vice president, Glenn L. R. Baumhardt (l), Redmond Co., Owosso, Mich., presents Homer Hauger Memorial Award to Lester E. Davis (r), director of purchases, Pitman-Moore Co., Indianapolis. This award is granted annually to the District 4 member who has done the most to advance the purchasing profession during the preceding year. Past winners include: J. Stanley Bien, purchasing director for the State of Michigan; E. Wayne Allen, purchasing agent for Diamond Chain Co., Indianapolis; and Russell T. Stark, director of purchases, Burroughs Corp., Detroit.



"ACTION FROM REPUBLIC SAVED US MONEY"

—Jim Cole, Steel Purchasing Agent

How Republic metallurgists helped Applied Arts Corporation solve a difficult stainless steel forming problem

Applied Arts Corporation, Grand Rapids, Michigan, makes stainless steel trim for the automotive industry. For one 1960 model, they were under contract to produce window trim that was stamped rather than roll formed. The piece called for a particularly severe draw.

"Our design engineers reported that we were getting a badly roped surface on this window trim," says Mr. James W. Cole, Steel Purchasing Agent. "Republic field metallurgists were called in and went to work immediately. They investigated forming operations: blanking, rough drawing, rough curling, cam flanging, finish curling, notching, and polishing. Then they met with their mill and laboratory metallurgists.

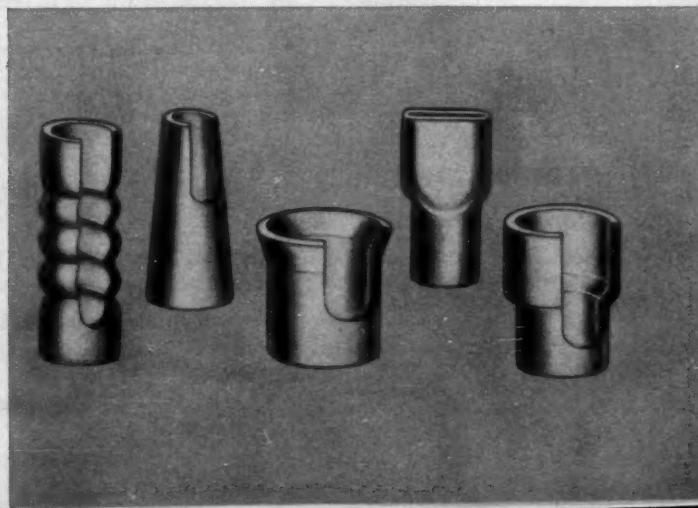
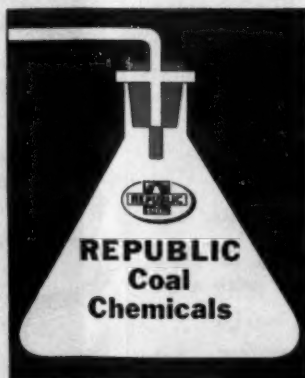
"The solution came in time to effect substantial savings. Republic metallurgists found that by slightly varying the physicals of the stainless (type 430), the breaking was eliminated. As a result, we have been able to stay with the same forming operations. Reject rate is below our original estimates."

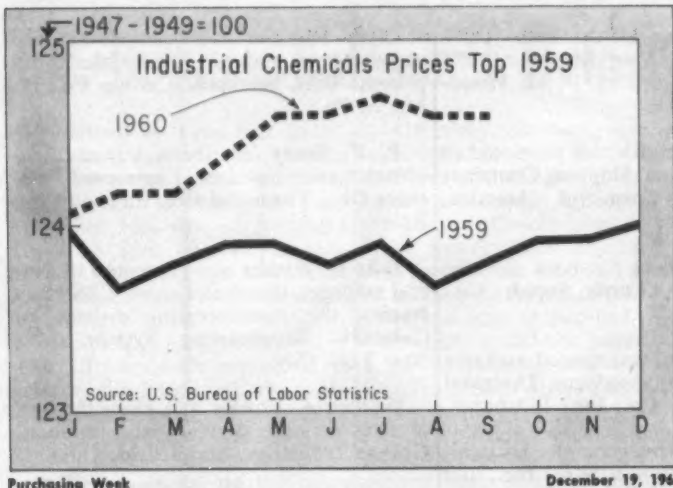
REPUBLIC STAINLESS STEEL METALLURGISTS will help you select, apply, and process the stainless steel — from our more than 40 standard types — best suited to your requirements. Write today or mail the coupon for information on this confidential, obligation-free service.

SIMPLIFIED TUBULAR PARTS PRODUCTION results from the use of Republic ELECTRUNITE® Round Mechanical Tubing. With uniform wall thickness, concentricity, strength, and ductility, this tubing is easily flanged, swaged, flattened, spun, fluted, configured, rolled, upset, and otherwise changed in cross section. ELECTRUNITE is formed from highest quality flat rolled steel . . . welded without the addition of foreign metal. Available in carbon and stainless. Mail coupon for data.

VACUUM-MELTED METALS are produced by Republic in up to 20,000-pound heats. Available in billets, plates, sheets, bars, strip, and wire, these include: super alloy steels, constructional alloy steels, high strength alloy steels, bearing steels, special carbon steels, stainless steels, and titanium. The consistently high purity of vacuum-melted metals enhances mechanical properties—ductility, resistance to notch sensitivity, fatigue life, tensile strength, and others. Return coupon for information.

REPUBLIC COAL CHEMICALS — Benzols, Toluols, Xylois, Crude Napthalene, and Sulphate of Ammonia are available from Republic and ready for immediate shipment from Cleveland, Massillon, Warren, and Youngstown, Ohio; Chicago, Illinois; Birmingham and Gadsden, Alabama. For full information, contact your nearest Republic representative or mail the coupon.





Chemical Prices Poise for Gradual Easing Off

New York—Some key chemicals appear to be on the verge of a downward drift in price.

The cause can be laid to one or more of the following reasons:

- Foreign competition.
- Ending of shortages.
- Over-production.
- Substitute materials.

Indications are that the price easiness will slowly erase much of the year-to-year gain shown in the chart at the left.

High on the list of key chemicals scheduled for early reductions is trichloroethylene.

This widely used metalworking solvent is being hard pressed by foreign competition. Imports—mainly from Italy and the United Kingdom, but also from Sweden, Germany and Belgium—are expected to total 57-million pounds this year, 10% above 1959 and some 63% above 1958.

Domestic trichloroethylene currently is selling at 12¼¢/lb. The foreign product is listed at ½¢/lb. below that, but is reportedly being discounted as much as 2¢ to 3¢/lb. under the domestic price for quick sales.

Resins, pushed by a surge in world paper production, have practically doubled in price over the past year and a half—reaching \$18/cut for gum resins, \$15 for wood resin, and \$14 for tall oil resin. Helping to lighten an already short supply situation is the steady reduction in Chinese shipments to the West.

But these high prices should ease soon. For one thing they are making producers nervous. They fear customers may turn to substitute materials. Furthermore, the maintenance of current tags would encourage a spurt in resin production—especially gum—which would lead to upsetting a healthy supply-demand situation.

Drying Up of Stocks

Also, part of the rapid demand growth stemmed from the drying up of stocks held by the Commodity Credit Corp. Elimination of this source of supply scared many customers into the market to build up inventory. Having built up inventory, these buyers don't have to come into the market until resin tags start going down.

Prices of coke-oven chemicals—which had been rising because low steel production had cut the available supply—also appear to be leveling off, and may soften before mid-1961.

One hint of this prospect came when Allied raised its price for phthalic anhydride 1¢/lb. three weeks ago. Competitors still haven't followed suit despite the fact they're only able to fill about half their customer orders. The reason: There's plenty of phthalic capacity around and much more will be coming onstream in 1961.

Short Term Squeeze

The present bottleneck comes from the shortage in its raw material—coal tar naphthalene. But this raw material squeeze promises to be of short duration because:

- U. S. Steel and Koppers recently began selling naphthalene mixed with isomers—price basis equivalent to 6¢/lb. for 78% naphthalene—which can be used as a source of phthalic.

- Ortho-xylene is expanding as an alternative source of phthalic.

- A steep increase in supplies of petronaphthalene (naphthalene from petroleum) is scheduled for 1961—starting in February.

In fact some observers look for coal-tar naphthalene to start cutting its price to hold its markets when the petroleum product hits the market.

And since phthalic anhydride tags are traditionally pegged at 13¢/lb. above the price of naphthalene, the assumption is these prices would also be lowered.

The price of benzene—another coke-oven chemical in short supply—also appears to have leveled off. The reason, again, is a scheduled increase in benzene produced from petroleum.

But this situation has created a bullish prospect for toluene tags. Toluene is the important petrochemical source of benzene, and is expected to be in tight supply in the near future. As a start, on Jan. 1 toluene will cost 25¢/gal f.o.b. instead of the same price delivered.



REPUBLIC STEEL

*World's Widest Range
of Standard Steels and Steel Products*

REPUBLIC STEEL CORPORATION

DEPT. PH-9710-C

1441 REPUBLIC BUILDING • CLEVELAND 1, OHIO

Please send more information on:

- ☐ METALLURGICAL SERVICE
- ☐ Stainless Steel
- ☐ Republic Coal Chemicals
- ☐ ELECTRUNITE Mechanical Tubing
- ☐ Vacuum-Melted Metals

Name _____ Title _____

Company _____

Address _____

City _____ Zone _____ State _____

In the World of Sales . . .

Ken C. Tucker has been promoted to assistant sales manager, **Onkite Products, Inc.**, New York City.

Dwain E. Morse has been elevated to district sales manager, **General Electric Co.'s Semiconductor Products Dept.**, Liverpool, N. Y.

John C. Taliaferro has been appointed manager of hydraulic dredge sales, **Morris Machine Works**, Baldwinsville, N. Y.

John W. German has succeeded George L. West as manager, building product sales, **Merchandising Div., Pittsburgh Plate Glass Co.**, Pittsburgh.

Edwin M. Yeager, Jr. has joined **Lewis Research Laboratories, Inc.**, Consumer Products Div., Englewood, N. J., as sales manager and Adele Berné was made manager of industrial sales. Yeager was formerly with Hess's and Berné was with N. W. Ayer & Sons, Inc.

John T. Evans was assigned the post of sales manager, **Delcon Corp.**, Palo Alto, Calif. He was formerly with Alpha Corp., a division of Collins Radio.

Harold L. Russell was made general sales manager, **Weston Instruments Div., Daystrom, Inc.**, Newark, N. J.

Frank B. Marwood has been elevated to sales manager, **Gulf Oil Corp.**, New Orleans.

Harry Joseph Pieper has been named sales manager, **Scripto, Inc.**, New York, Philadelphia & Washington areas.

J. W. Rose was given the post of sales manager, **Fansteel Metallurgical Corp.**, North Chicago.

George W. Finlay has been named manager, bag plant and sales division, **Bemis Bag Co.**, Wichita, and will be succeeded as supervisor for multiwall bag

sales, St. Louis, by U. A. Tull. Tull's post as sales manager, Memphis sales division, will be filled by D. H. Woodmansee, Jr.

Roger B. Kirkpatrick was promoted to general sales manager, **Shipping Container Div., Container Corp. of America**, Chicago.

Robert C. Coleman has been elevated to sales manager, **Curtis Supply Co.**, Buffalo, N. Y.

A. Campbell, Jr., was named manager of sales and marketing services, **Thermoid Div., H. K. Porter Co., Inc.**, Pittsburgh.

F. Richard Convey, general sales manager, **John W. Bolton & Sons, Inc.**, and **Emerson Mfg. Co. Div.**, has been given the added responsibility of directing sales for the **Bolton Machine Knife Div.**, Lawrence, Mass.

Walter J. Gans, Jr., has moved up to sales manager, **Warehouse Div., Reynolds Aluminum Supply Co.**, Atlanta, Ga.

Elmer R. Bradley is now in charge of merchandising and sale of motor products and Marcus A. Markley of industrial, wholesale, fuel oil and foreign sales, **Sun Oil Co.**, Philadelphia.

Frederick C. Irving, Jr., was appointed manager of casting sales, **Sales Development Div., Aluminum Co. of America**, Pittsburgh.

Cleveland Elec. Adopts 'Buy-American' Policy

Cleveland—Cleveland Electric Illuminating Co. has announced a new "Buy-American" policy that bans all purchases from foreign suppliers except in "unusual cases."

The announced policy, believed to be the first from a large electric utility in recent years, has been sent to all Cleveland Electric suppliers. It cites these exceptions:

- Items not manufactured domestically.
- Items currently unavailable from the domestic market.
- Items for which there is inadequate domestic competition.

The company did not spell out what it meant by "inadequate competition," nor did it indicate whether it would establish price differentials to guide its buyers.

The company will implement its policy in these ways:

(1) Inquiries will go only to domestic companies. Says the announcement, "We advise the representatives of foreign companies who call on us that it is our policy to buy American."

(2) Within the company, the purchasing department should be consulted on all considerations of foreign purchases "whether as outright purchases by our company or as components of other equipment which may be imported. This consultation should occur prior to any discussions with potential suppliers."

In another "Buy-American" development the Tacoma Utility Board awarded a \$20,428 contract for lightning arresters to General Electric Co., overruling a staff recommendation in favor of Pacific Oerlikon Co., a Swiss firm. Although the Swiss firm was low bidder at \$15,120, the board ruled that the award should go to a U.S. firm.

Meanwhile, the Texas State Highway Commission's ban on use of foreign steel on Texas road projects has been widened to include Federal road jobs as well. The ban is effective Jan. 1, 1961.

Before it could proceed with its ban, approval of the U.S. Bureau of Public Roads was needed. When this was obtained, hearings were held to air objections from foreign steel importers and other opponents of the move.

Clyde Robison has been elevated to assistant sales manager, **Electronics Components Div., Stackpole Carbon Co.**, St. Marys, Pa.

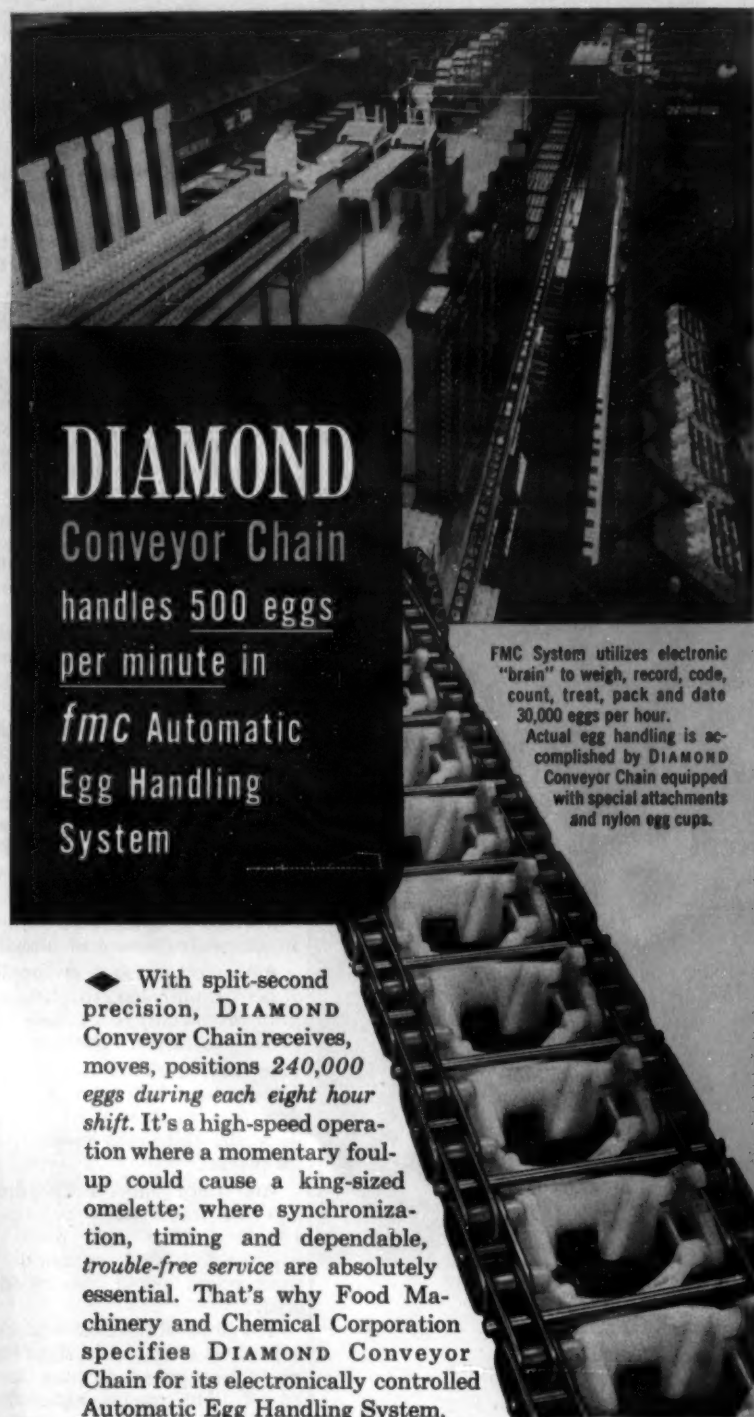
P. F. Barry has been advanced to assistant sales manager, **Engineered Fasteners Div., Townsend Co.**, Ellwood City, Pa.

John H. Hauser was promoted to general manager, distributor sales, **CBS Electronics**, the manufacturing division of **Columbia Broadcasting System, Inc.**, New York City.

William A. Rowley was given the post of sales manager of all plastic products, **Geauga Industries**, Middlefield, Ohio.

Carl J. Siebert, Jr., has been appointed sales manager **Aronson Machine Co., Inc.**, Arcade, N. Y.

George E. Gunther was made domestic sales manager, Trojan tractor shovel line, **Yale & Towne Mfg. Co.**, Batavia, N. Y. He was formerly with Thew Shovel Co.



DIAMOND
Conveyor Chain
handles 500 eggs
per minute in
fmc Automatic
Egg Handling
System

FMC System utilizes electronic "brain" to weigh, record, code, count, treat, pack and date 30,000 eggs per hour. Actual egg handling is accomplished by DIAMOND Conveyor Chain equipped with special attachments and nylon egg cups.

◆ With split-second precision, **DIAMOND** Conveyor Chain receives, moves, positions 240,000 eggs during each eight hour shift. It's a high-speed operation where a momentary foul-up could cause a king-sized omelette; where synchronization, timing and dependable, trouble-free service are absolutely essential. That's why Food Machinery and Chemical Corporation specifies **DIAMOND** Conveyor Chain for its electronically controlled Automatic Egg Handling System.

DIAMOND CHAIN COMPANY, INC.
A Subsidiary of American Steel Foundries
Dept. 627, 402 Kentucky Avenue • Indianapolis 7, Indiana

DIAMOND  **ROLLER CHAINS**

- Offices and
- Distributors in all
- Principal Cities

Get Rocket-Fast Shipment from world's largest STOCK of Stainless Steel Fasteners

No long countdowns here. Allmetal stainless fasteners are stockpiled in advance—ready to go on your order. Fasteners in Commercial, AN, MS specs. You get fast delivery, precision quality, plus mass production economy when buying direct from stock.

Special fasteners also fabricated to your exact requirements on extremely short notice. Full range of raw materials assures prompt service. Simply send blueprint or specifications.

Pins • Bolts • Nuts • Screws
(including slotted and Phillips—magnetic and non-magnetic)
• Washers • Cotter Pins • Rivets
• Rods • Studs • etc.

PHONE OR WRITE
for prompt quotation or shipment. Send for catalog.

ALLMETAL®
SCREW PRODUCTS COMPANY, INC.
Manufacturers of Stainless Fasteners Since 1929
821 Stewart Avenue, Garden City, L.I., N.Y.
Phone: Pioneer 1-1200 TWX GCY 603

Midwest Division
6424 W. Belmont Avenue, Chicago 34, Illinois
Phone: AVenue 2-3232 TWX CG 3185
West Coast Division—Office and Warehouse
5822 West Washington Blvd., Culver City, Calif.
Phone: WEster 3-9595 TWX LA 1472

CIL Buyers, Salesmen Help Each Other Learn

Montreal — Canadian Industries, Ltd., has a novel training program that exposes apprentice buyers and salesmen to their opposite numbers—thus giving them an idea of the problems they'll have to cope with, once they settle down to the practice of a daily routine.

The program works two ways:

- CIL sends the novice buyer out on the road with the company salesmen to give him an idea of the view from the other side of the purchaser's desk.

- Sales trainees, on the other hand, sit behind the buyer's desk at CIL to discover at first hand what it's like to be on the receiving end of a sales pitch.

Because CIL has a wide range of products—heavy chemicals, paint and varnish, fertilizers, plastics, fabrics, explosives, ammunition—this exposure gives both types of trainee a complete picture of the production cycle—from raw material to finished product.

Graham Goodall, the purchasing department man in charge of training, sums up the program's benefits to the novice buyer this way:

- He becomes better acquainted with other purchasers and their problems.

- He learns how to size up a good salesman.

- He gains a better knowledge of the company's product line.

- He gets an insight into the psychology of supplier salesmen.

In addition, comments Lester Clegg, CIL's general purchas-

Although scheduling of the salesman's time is fairly easy, this isn't true for the buyer who trains a salesman. Because of the crowded schedule at the office, buyers take salesmen in tow only on the second Tuesday of every month. Each salesman spends a total of two-and-a-half days training under a buyer, and a half day looking at the administrative aspects of the purchasing department.

When working under a buyer, the sales trainee sits beside him on the buying side of the desk.

When a visiting salesman comes in, he is introduced to CIL's trainee salesman and told why he is being observed.

After the salesman leaves, buyer and trainee discuss the various aspects of the salesman's presentation. The buyer points out to the sales trainee how the visiting salesman measured up in terms of product knowledge, market knowledge, and general commercial intelligence. He may even find that he picks up a point or two from these buyer-salesman discussions.



PURCHASING AGENT S. C. K. Ward (center) and sales trainee Don Morrin (left) listen to pitch by visiting salesman. After salesman leaves, Ward will analyze presentation for purchasing's viewpoint.



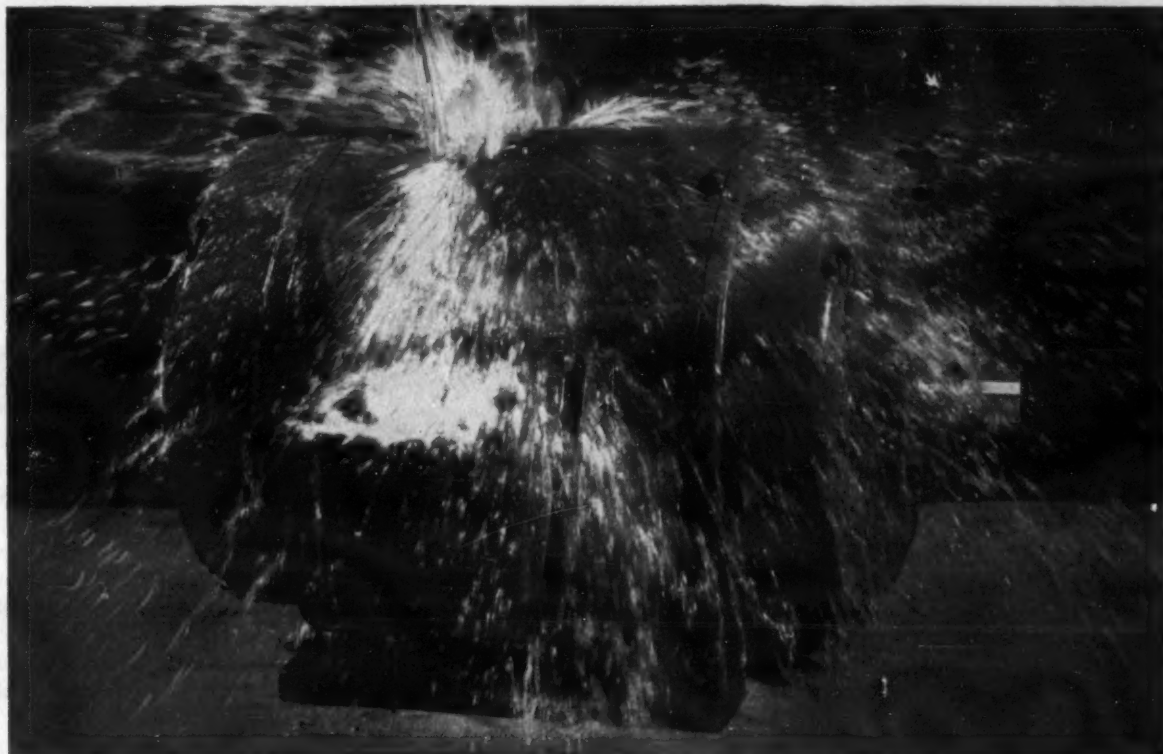
PRODUCT KNOWLEDGE is emphasized by J. E. McGill (left) during salesman Don Morrin's training under the purchasing department.

ing agent, he learns to watch out for the little details that can make the difference between good and bad supplier relations.

For example, says Clegg: "A buyer trainee may find that other buyers keep salesmen waiting for no particular reason. Or he may note how awkward it is for salesmen to try to sell to a buyer when the buyer doesn't have a private office—or when the buyer holds the interview in a room where there is no desk or table on which to display products."

"The novice comes back resolved that things like this will never happen—if he can help it—when he becomes a full-fledged buyer," concludes Clegg.

The program is designed to give the maximum payoff with the minimum interference with normal business procedures. There are no involved program schedules or lectures. The buyer trainee simply goes out for one week with a salesman.



Sudden Splash OR Soaking Shower

won't stop a Wagner® DP Motor...

Wagner® Type DP Motors are doubly protected by rugged, corrosion-resistant cast iron frames and drip-proof enclosures. Splashing or falling liquids, corrosive acids, salts, and alkalis can't stop their smooth operation. Designed to meet a wide variety of applications—including many that used to require splashproof motors—Wagner Doubly Protected Motors pack plenty of power into precious little space, are lightweight, long-lived, and pare down-time and upkeep costs to the bone. Simply put... they get the job done. Let your nearby Wagner Sales Engineer show you how these motors can be applied to your needs. Call him, or write for Bulletin MU-223.

Wagner Electric Corporation

6416 PLYMOUTH AVE., ST. LOUIS 33, MISSOURI



SLEEVE BEARING MODELS AVAILABLE... DP Motors are built in NEMA frame sizes 182 through 445U; 1 through 125 hp—1750 RPM—40°C; available with ball bearing construction as illustrated or steel-backed, babbitt-lined sleeve bearings. Larger motors (Type RP) are available through 1000 hp.



CAN BE RELUBRICATED... Original factory lubrication will last for many years in normal service, but openings are provided to permit the relubrication that adds years to motor life under severe conditions.



COOL RUNNING... Specially designed baffles direct cooling air through the motor to reduce stator temperature, thus increasing motor life. Blowers, cast as part of the rotor, move large volumes of air without noise or vibration.

WH60-20



CALL DIRECTOR lets secretary cover up to 30 phones, aids businessman who needs more than six pushbuttons.

WHAT'S AVAILABLE IN

Equipment

CALL DIRECTOR

Provides centralized telephone an

BELLBOY

Provides personal signaling servi

AUTOMATIC ANSWERING SERVICE

Answers the phone and takes m

DATAPHONE

Lets business machines talk to ea

SPEAKERPHONE

Allows you to talk on the phone

INTERCOM

Lets you talk to associates withou

AUTOMATIC CALL DISTRIBUTOR

Directs incoming calls to the next



AUTOMATIC ANSWERING SERVICE gives caller a 30-second recorded announcement when you are away from your desk—lets him record a half-minute answer to await your return.

New Telephone Devices

The Bell System is unveiling a host of new telephone attachments designed to speed up, and broaden the range of, your business contacts. The new family of gadgets can do about anything in the communications line—except dial a number for you. (Some companies are reported to be working on a device that will do that, too.)

Equipment that formerly was bulky is being packaged in attractive, functional units. For example: Switchboards that once housed hundreds of spaghetti-like cords now are compact desk top units with rows of buttons. These units are control devices—the bulky relay cabinets that do the real work are hidden away in an unused corner of the office.

The latest addition to Bell service is the "Bellboy," pictured in the upper right hand corner. This service now is being made available in major metropolitan areas. Here's how it works:

You wear a compact (7½ oz.) receiver clipped to your belt or pocket. Whenever your office wants to contact you, it calls the Bellboy operator and tells her to signal you. Your receiver gives off a soft signal tone, letting you know that you are to get in touch with your office at once.



SPEAKERPHONE gives "hands-free" talking. You press a button when the phone rings and a loudspeaker brings the call to you. The desktop microphone picks up your voice.



INTERCOM lets you dial up to 36 extensions on inside line—leaving your extension free to receive outside calls. Can be set up to handle conferences, add any associates to a call.

PHONE CONVENIENCES

It Does

ering service for up to 30 people.

anywhere in metropolitan areas.

ages when you are away from your desk.

other at regular toll call rates.

thout picking up the receiver.

tying up your outside phone wire.

ne unit in a battery of telephones.

Approximate Monthly Rental

\$10-\$15

\$15

\$15-\$20

\$5-\$40

\$7-\$8

\$10-\$30
(entire system)

\$300-\$400



BELLBOY, available in major cities, signals you outside the office—tells you to phone for the message awaiting you.

Save Time, Speed work

Bellboy receivers are selective, respond only to a special signal. Bell engineers view this gadget as a first step toward a completely portable phone.

Another Bell innovation that shows great promise is Direct Inward Dialing (DID). This system allows you to dial any extension direct—by-passing the switchboard. Bell surveys indicate that when DID is installed, about 80% of all incoming calls will go direct. The other 20%, of course, would go through a switchboard which would be much reduced in size.

DID also is being coupled with direct outward dialing to let the extension user dial anyplace in the country without going through the company operator. Calls are billed to each extension.

Message waiting service now being installed in hotels will soon be going into business applications. A small flashing light on your phone lets you know that the operator has a message waiting for you.

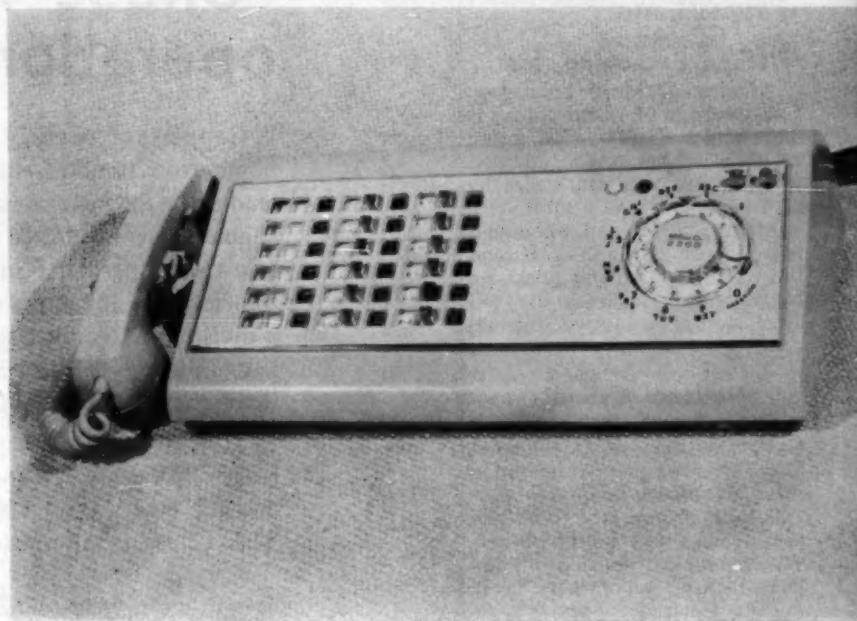
Mass announcement service—similar to the weather forecast obtained by calling certain number in your city—is also available to business. The person calling the special number will be greeted by a recording extolling the virtues of your product, or rendering any other desired message.



DATAPHONE works with business machines to send data over regular phone lines at toll call rates. The various models handle everything from handwritten to computer messages.



AUTOMATIC CALL DISTRIBUTOR has been designed for businesses handling large volumes of phone orders or inquiries. Unit routes calls to the next free attendant in priority order.



PBX switchboards are available to handle any number of outside lines and inside extensions. Model above can give complete operator service for up to 60 different phones.

New Plants and Acquisitions

U. S. Paint & Chemical

Philadelphia—U.S. Paint and Chemical Corp. has set up a manufacturing installation here. The firm manufactures truck refrigerant insulation and protective coatings.

Kaiser Aluminum

San Francisco—Kaiser Aluminum and Chemical Corp. will build a \$1.4-million aluminum fluoride plant at its Gramacy, La., works, in another step to integrate its sources of important raw materials.

The firm also plans a 50% expansion at its primary reduction plant at Chalmette, La. The project is expected to be completed next year at a cost of about \$2-million and will increase Kaiser's capacity for casting high-quality billet.

Crown Zellerbach

San Francisco—Production has started at Crown Zellerbach's new corrugated sheet plant in Weslaco, Texas. The 40,000 sq. ft. packaging plant is operated by C-Z's Gaylord Division.

Commercial Plastics

Newark—Commercial Plastics & Supply Corp. will triple its facilities when it moves to a new building this month at 127-139 Frelinghuysen Ave. here. The new plant is planned to be the largest, most efficient plastics warehouse in the state, a spokesman said.

Diamond Chain

Dallas—Diamond Chain Co., Inc., Indianapolis, has opened a factory warehouse and sales center here, providing a central supply point for industrial concerns and oil fields in the South and Southwest.

The 7,500 sq. ft. warehouse will provide one-day delivery to Texas, Louisiana, Oklahoma, Arkansas, and Mississippi.

I-T-E Switches

Philadelphia—I-T-E Circuit Breaker Co. has switched from distributor to direct sales on the West Coast and opened new offices in Portland, Ore., at 1010 S.W. 14th St., and Seattle, Wash., at 910 Fifth Ave.

Mead Packaging, Inc.

Atlanta—Mead Packaging, Inc., division of Mead Corp., is launching a \$2-million expansion at its plant here. The addition will increase the plant's size by 40%, adding 218,000 sq. ft.

Manufacturing and warehouse use will use 175,000 sq. ft. and the remainder will be taken up by expanded facilities for roll stock storage and for coating and color processes.

National Cylinder

Chicago—National Cylinder Gas Division of Chemetron Corp. has placed in operation three transfilling plants to provide local customers with oxygen for medical and industrial use. The plants are located in San Diego, Salt Lake City, and Pueblo, Colorado. They will receive liquid oxygen from nearby NCG production facilities and will convert it into gas for delivery to customers.

Universal-Cyclops

Bridgeville, Pa.—Universal-Cyclops Steel Corp. has expanded its specialty steel service program to speed deliveries of stainless bar and wire, and tool and die steels.

Included in the expansion is a greatly enlarged and modernized facility here, plus new and enlarged facilities at Titusville, Pa., Chicago, Cleveland, Detroit, New York, and Worcester, Mass. The firm has also installed a private wire telegraph system linking 18 sales offices and serv-

ice centers and mill headquarters.

Seco Mfg.

Wauseon, Ohio—Construction has begun on a new building to house Seco Mfg. Co., manufacturer of small fire engines for use inside industrial plants. The plant will have 19,000 sq. ft. of space and is scheduled for completion next spring.

Crescent Co.

Pawtucket, R. I.—Crescent Co. has purchased 38 acres in Lincoln, R. I., as the site for a

250,000-sq.-ft. plant. The firm has manufactured insulated wire and cable here since 1924.

Continental Screw Co.

New Bedford, Mass.—Continental Screw Co. has opened a new warehouse in Richmond, Ind. Stocks of Phillips, slotted wood, machine, tapping, and thread cutting screws will be carried by the new distribution point.

Dixie Chemical

Houston—Dixie Chemical Co., chemical distributor, is building a new chemical processing facility here. It will be

used to upgrade by-products and waste materials of nearby chemical companies. Dixie has pioneered in the development of chemical additives used in oil well drilling and distributes a variety of organic chemicals throughout the Southwest.

Publicker Industries

Philadelphia—Publicker Industries, Inc. will build a \$5-million carbon dioxide gas recovery plant near its Philadelphia facility. The new installation will recover gas from flue gases of its main steam plant, and will use it to manufacture dry ice and liquid carbon dioxide.



"Chase" metals save 50% on buffing operations,"

says John Linkamper, Purchasing Agent for Coppercraft Guild Gift Wares

Coppercraft Guild Gift Ware is sold in the home, from samples—and has won its position of leadership through its matchless appearance. The slightest flaw in surface or finish could prevent a sale to Coppercraft Guild's discriminating customers. Mr. Linkamper reports that Coppercraft, a division of Armor Bronze and Silver Co., has had uniformly high acceptance for 65 or more items they make using Chase brass and copper.

Prior to using Chase metals, production problems were caused by critical deep-draw operations and the need for lengthy buffing and polishing. Then Chase metallurgists were presented with the

problems...recommended a Chase alloy which withstood the deep draw perfectly and provided a 50% reduction in buffing and polishing. Added advantage: the stocks of metal in the nearby Chase Multi-Metals Service Center made it possible for Coppercraft Guild to order from stock, saving on storage space, metals inventory and handling.

End result of this co-operation between Chase and the manufacturer is reported to be "the exact appearance and quality we want...fewer rejects...50% reduction in buffing costs...enabling us to lower our costs."

Chase metals and Chase skills are ready to serve you in the same way.

This Week's

Foreign Perspective

DECEMBER 19-25

Rome—Speculation that tin prices may ease has come in the wake of the International Tin Council's (ITC) decision not to impose export quotas for tin producing nations for the first quarter of 1961.

Export quotas for its six producer-member nations had been removed by the ITC in the fourth quarter of 1960. In deciding not to reimpose them, ITC President George Peter described the tin market as in a "healthy state" as far as supply-demand balance was concerned.

The balance has been achieved through:

- The slow U. S. Demand of recent months was countered by increased purchases of tin in Europe.

- Russian tin offerings in Western markets have fallen about 4,000 tons short of expectations.

- Bolivian production—about 18% of world total—has declined because of labor troubles and mine-flooding rains.

But Bolivia reportedly has its production problems well in hand now. And if the Soviet bloc increases its tin export flow, the supply of available tin may go up enough to soften current prices. In addition, unrestricted production in countries unhampered by export quotas increases the possibility of special lower-price deals.

Any price decline in tin, however, is not expected to be substantial. The ITC can still influence tin prices through the operations of its Pool Manager. These operations consist of buying up tin in the marketplace when tin tags are weak and selling from buffer stocks when prices are too high.

London—The first permanent government-sponsored overseas trade center will open here next spring. The center will help U. S.

firms find British distributors, test the market, and boost interest in American products.

An aggressive sales wrinkle may be applied. Company representatives handling on-the-spot transactions. Articles offering the best sales prospects in Britain will be featured at the center, which will be operated by the U. S. Embassy in conjunction with both the Commerce and Agriculture Depts.

Washington — Two developments have improved the United States' gold position:

- Sale of \$300-million worth of gold by the International Monetary Fund to the U. S. brought reserves to \$18,177,000,000.

- Cut in interest rate by the Bank of England to 5%.

The sale of gold to the U. S. put gold reserves at slightly more than the \$18-billion benchmark figure that economists regard as safe—and just \$1.3-billion shy of the figure at the start of 1960.

Since the beginning of the fiscal year, foreign purchases of U. S. gold—about \$1.4-billion—had plunged the U. S. supply below the calculated margin of safety and gave rise to some fears that a "run" on gold might develop. The (IMF's) unsolicited sale boosted the American bullion holding from its lowest level in more than 20 years.

The Bank of England's cut in its discount rate by half a percentage point was the second such reduction in little more than a month.

The move should lower interest rate schedules in England and make U. S. investment there less attractive. This, in turn, would help dam the flow of short-term money going out of the U. S. which has been a major cause of the gold outflow.

Paris—The French chemical industry is ruffled by U. S. expansion in France even though it predicts a 20% production gain of its own in 1960.

Maurice Brulfer, President of the Union des Industries Chimiques, France's chemical trade association, said that although the U. S. puts only 6% of its chemical production on the international market, this total is equal in value to half of French production.

He claims it is difficult for a French company to compete with an American firm whose profits alone are often as much as the French company's total turnover.

New York — The major oil companies are making broad expansion moves overseas.

The Royal Dutch Shell group has been awarded an offshore oil exploration concession in the Persian Gulf by Kuwait for a bonus of \$84-million. Kuwait, the largest oil producer in the Middle East, has contracted to receive 50% of the profits with an option to purchase 20% of the operating company.

Gulf Oil will construct its first European oil refinery at Stignæs, Denmark. The refinery, which is to process 1.5-million tons of crude oil annually for Gulf's Scandinavian markets, is scheduled to be in full production by the end of 1962.



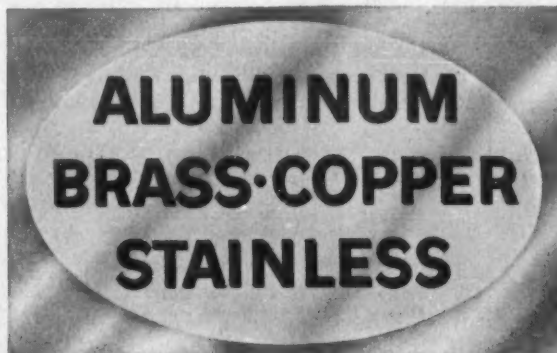
NEW 3-MARK ROD is the free-cutting brass rod designed by Chase to meet the demands of modern high-speed machines. Cuts freely with short chips... is extremely straight to cut down whip. Check coupon for details on 3-Mark Rod.



THIS CHASE FORGING, for the trunnion of the gauge shown above, gives excellent dimensional accuracy. Chase forgings are die-pressed, made to close tolerances, free from pits and blowholes. Need far less finishing, too.



NEED STAINLESS OR ALUMINUM? The Chase Multi-Metals Service Center nearest you has the types and quantities you want. Call for a copy of the latest stock lists, or check and return the coupon at the right.



Chase Multi-Metals Service Centers:

ATLANTA 10, GA.
695 Stewart Ave., S.W.
Tel. PLaza 5-5731

BALTIMORE 30, MD.
1315 Key Highway
Tel. PLaza 2-2565

BOSTON 4, MASS.
411 "D" Street
Tel. Liberty 2-0126

CHARLOTTE 2, N. C.
222 S. Church St.
Tel. EDison 2-4152

CHICAGO 39, ILL.
5401 W. Grand Ave.
Tel. TUxedo 9-4000

CINCINNATI 2, OHIO
222 Post Square
Tel. PArkway 1-3326

CLEVELAND 3, OHIO
4000 Chester Ave.
Tel. HEnderson 2-2300

DALLAS 7, TEXAS
5052 Sharp St.
Tel. FLeetwood 7-8187

DENVER 16, COLORADO
5101 Colorado Blvd.
Tel. DUdley 8-2441

DETROIT 38, MICHIGAN
14480 Woodrow Wilson Ave.
Tel. TOWnsend 8-2939

GRAND RAPIDS 2, MICH.
200 Division Ave., N.
Tel. GLendale 9-7136

HOUSTON 1, TEXAS
16 Drennan Street
Tel. CApiitol 2-7266

INDIANAPOLIS 21, IND.
1609 Oliver Avenue
Tel. MEIrose 7-1543

KANSAS CITY 8, MO.
1710 Washington St.
Tel. VICTor 2-1710

LOS ANGELES 54, CALIF.
6500 E. Washington Blvd.
Tel. RAYmond 3-5351

MILWAUKEE 1, WIS.
1741 W. St. Paul Ave.
Tel. Division 2-7630

MINNEAPOLIS 3, MINN.
145 N. Tenth St.
Tel. FEderal 6-4661

NEW ORLEANS 25, LA.
1000 So. Jeff. Davis Parkway
Tel. HUnter 6-5441

NEW YORK—NEWARK
55-60 58th St.
MASPETH 78, L. I., N. Y.

Tel. TWining 4-0500
Tel. BIdgelow 8-1700

PHILADELPHIA 40, PA.
20th and Venango Sts.
Tel. BAldwin 3-5800

PITTSBURGH 33, PA.
1001 Brighton Road
Tel. CEdar 1-7900

PROVIDENCE 1, R. I.
66 Branch Avenue
Tel. DEXter 1-2300

ROCHESTER 14, N. Y.
45 Exchange St.
Tel. HAmilton 6-3959

ST. LOUIS 10, MO.
4641 McRee Ave.
Tel. PROspect 6-3111

SO. SAN FRANCISCO, CALIF.
230 Shaw Road
Tel. JUnio 3-4994 or PLaza 6-4809

SEATTLE 4, WASH.
1957 First Ave., S.
Tel. MAln 4-1862

WATERBURY 20, CONN.
40 East Farm St.
Tel. PLaza 6-9444, Ext. 209



Chase

BRASS & COPPER CO. WATERBURY 20, CONN.

Subsidiary of **Kennecott Copper Corporation**

CHASE BRASS & COPPER CO.

DEPT. FW-12, WATERBURY 20, CONN.

Please send me information on the following:

- | | |
|---|--|
| <input type="checkbox"/> Sheet and Strip | <input type="checkbox"/> Aluminum Stock List |
| <input type="checkbox"/> Stainless Steel Stock List | <input type="checkbox"/> Chase 3-Mark Rod |
| <input type="checkbox"/> Forgings | |

NAME & TITLE _____

FIRM _____

STREET ADDRESS _____

CITY _____ ZONE _____ STATE _____

P/W School for Strategists

SCHOOL FOR STRATEGISTS presents two views of warfare at this session. One is a price war between companies; the other, a military man's war with his conscience.

Your object in these games, prepared by PW Consultant John M. Owen, Jr., is to determine which strategy will bring about the most favorable outcome.

By employing new mathematical concepts—herewith reduced to a quick set of visual aids—you can achieve your object speedily and safely.

To understand how Games of Strategy are played and solved, first concentrate on the following concrete example:

SAMPLE PROBLEM

Two competing companies—Arnold Corp. and Byerson Corp.—want to bid on a contract. They are such bitter rivals that they will thwart each other at the drop of a hat; in fact, each even thinks of the other fellow's losses as his own gains. Here is their situation:

- If Arnold bids and Byerson does not, Arnold will lose \$2,000.
 - If both bid, Arnold thinks he can gain \$1,000.
 - If neither bids, Arnold thinks he's \$3,000 better off than Byerson.
 - If Byerson bids, and Arnold does not, Arnold figures he's \$2,000 ahead.
- What should Arnold do?

HOW TO SOLVE SAMPLE PROBLEM

1. Let's concentrate on just one of the opponents for a starter—Arnold. Sort his possible moves into two logical groups: 1) What happens if he bids, and 2) what happens if he doesn't. This is what you get:

	Dollar Value of Move to Arnold
Arnold bids, Byerson doesn't.....	-\$2,000
Arnold bids, so does Byerson.....	\$1,000

Arnold doesn't bid, neither does Byerson.....	\$3,000
Arnold doesn't bid, Byerson does.....	\$2,000

2. Now put the dollar value of each move in a little box (called matrix) so you can inspect the situation visually. You want to solve it from Arnold's point of view, so write Arnold's moves at the left. Like this:

Arnold Bids	\$ -2,000	\$ 1,000
Arnold Doesn't	\$ 3,000	\$ 2,000

Incidentally, whatever Arnold does is the counterpart of what Byerson does (since there are only two players), so the box above really could be amplified like this:

	Byerson Doesn't	Byerson Bids
Arnold Bids	\$ -2,000	\$ 1,000
Arnold Doesn't	\$ 3,000	\$ 2,000

3. Find the lowest value in each horizontal series, and the highest value in each vertical series. Here's what you get:

	Byerson Doesn't	Byerson Bids	
Arnold Bids	\$ -2,000	\$ 1,000	\$ -2,000
Arnold Doesn't	\$ 3,000	\$ 2,000	\$ 2,000*
	\$ 3,000	\$ 2,000*	

4. Note that the figure \$2,000—starred for visibility—is common to both horizontal and vertical series. **THIS FIGURE IS THE STRATEGIC SOLUTION TO THE PROBLEM.** To put it another way: Arnold should not bid, and Byerson should. This is the sanest settlement for both.

Now try the following two problems, using the above technique:

Price War

Two manufacturers of office copying machines, Allkopy and Universal, are engaged in stiff competition. Both plan to bid for a large order from Castleton Insurance Co.

Allkopy had planned to ask for \$99 a machine, Universal for \$100. But Universal discovered Allkopy's plans and debated whether to cut its price to \$98. Then Allkopy's business spies got wind of Universal's maneuvering, and Allkopy also began considering cutting its price to \$98.

Here are the courses of action:

• If Allkopy bid \$99 and Universal \$100, Allkopy would get the contract at \$99, a gain of \$5,000 for Allkopy and a loss of \$5,000 by Universal.

• If Allkopy bid \$99 and Universal \$98, Universal would get the contract. But this would involve a loss of \$3,000 for Universal, since Universal's unit costs are somewhat above \$98. It also would be a gain of \$3,000 for Allkopy.

• If both companies bid \$98, the contract would be split, and both would sell at a loss. But Allkopy's financial reserves are lower than its competitor's this outcome would be a gain of \$1,000 for Universal, and a loss of \$1,000 for Allkopy.

• If Allkopy bid \$98 and Universal held to its \$100 offer, Allkopy would be stuck with a large and unprofitable order which would cost him \$5,000.

Here are the strategies as they appear to Allkopy's sales manager:

	Value To Allkopy
Allkopy bids \$98, Universal bids \$98.....	-\$1,000
Allkopy bids \$98, Universal bids \$100.....	-\$5,000

Allkopy bids \$99, Universal bids \$98.....	+\$3,000
Allkopy bids \$99, Universal bids \$100.....	+\$5,000

Now using game theory and the matrix below, what bid would you submit to the insurance company if you were Allkopy's sales manager?

(Answer on Page 22)

	Universal Bids \$98	Universal Bids \$100
Allkopy Bids \$98		
Allkopy Bids \$99		

The Colonel's Pension

Col. Spurr is procurement officer in the Cavalry Corps of a small nation. He is within a few months of retirement, but his pension has been jeopardized by rumors that his government is planning to investigate his dealings with Apex Ironsmith Co.

Apex, which was readying a directorship for the colonel upon his retirement, has been getting the Cavalry's horseshoe contracts for years. But Spurr has heard that Apex may seek a big price hike, and he now wonders whether he should ask for competitive bids on the next contract. Such action might cost him his Directorship at Apex, but would save his pension and reputation.

Here are the courses of action:

• If the colonel asks for competitive bids and Apex doesn't try a price gouge, he gets his pension but loses the Directorship. This outcome has a value of zero for the colonel.

• If he asks for bids and Apex's is high, his superiors may get suspicious and he might lose his pension—a value of -5.

• If he doesn't ask for bids and Apex doesn't raise prices, Spurr gets both pension and Directorship—a value of plus 10.

• If he doesn't ask for bids and Apex does raise prices, he will become a director but retire under a cloud—a value of -20.

Here are the strategies as they appear to Col. Spurr:

	Value to Colonel
Colonel asks for competitive bids; Apex raises price.....	-5
Colonel asks for competitive bids; Apex doesn't raise price....	0

Colonel doesn't ask for bids, Apex raises price.....	-20
Colonel doesn't ask for bids, Apex doesn't raise price.....	+10

Now, using the matrix below, figure out what is the colonel's best strategy.

	Apex Raises Price	Apex Doesn't Raise Price
Colonel Asks for Bids		
Colonel Doesn't Ask for Bids		

(Answer on Page 22)

Value of the Game

The "Value of the Game" is the payoff you get from good play according to the rules of Games of Strategy. You can't win more than this figure, unless your opponent plays poorly, or makes mistakes. And you can't count on him to do this. On the other hand, if you are greedy and use a strategy other than the safe and sane, you may get less than the value of the game—or even lose. In any event, you won't win more by shooting the works.

In the sample game, this value is the starred solution—a gain of \$2,000 for Arnold, or a loss of \$2,000 for Byerson. In the homework for today, it is also the starred quantities (see answers on page 22). Another way of looking at the value of the game is that it is the average best payoff if you played the game many times against a skilled opponent.

U.S. Seen Buying More Raw Material in Canada

Washington—The U. S. will rely more on Canada to supply raw materials for domestic industries in the next two decades. That's the chief finding of a Canadian-U. S. trade report which also predicts consumption of raw materials for both U. S. and Canada will double by 1980.

The report, published by the National Planning Assn. and prepared by W. G. Fritz of the U. S. Office of Civil and Defense Mobilization, said the U. S. will depend more heavily on Canada for such raw materials as iron ore, natural gas, nickel, and asbestos.

Canada, in turn, will become dependent to a great extent upon U. S. supplies of coal, molybdenum, and phosphate, the report predicted. Significantly, the report adds "both countries will become more dependent upon sources of supply outside of the North American continent."

Over-all deficits are forecast in tin, manganese, chromite, bauxite, tungsten, and fluorspar.

The report's forecast is based on a projected 4.1% increase in the U. S. gross national product and a 4.9% increase in Canada's total goods and services. The estimate also assumed a 4% average unemployment rate, a slight annual decline in the average work week, and an annual 3% increase in productivity.

Biggest X-Ray Machine

Burlington, Mass. — The world's most powerful X-ray machine, designed for high speed radiography in the metals industry is being built here by the High Voltage Engineering Corp. for installation at A. O. Smith Corp's Milwaukee, Wis., plant next spring.

The 8-million-electron-volt-linear accelerator is designed to "see" through steel more than a foot thick to check quality for nuclear reactors and high pressure vessels used in the chemical industry.

Competition Heats Up Between LPG And Big Natural Gas Fuel Suppliers

New York—Increased competition between fuel suppliers in the West, Midwest, and South built up last week as producers of natural gas and liquefied petroleum gas reached out for new markets.

There were these developments:

- Southern California Edison and California Gas Transmission Co. asked permission of the California Public Utility Commission to build a \$225-million 1,600-mile pipeline to bring Texas natural gas into the state.

- A \$13-million system of plants to process LPG, the largest in the U.S., was put into operation in Louisiana by Union Oil of California and Goliad Corp., Houston.

- The Trans-Southern Pipeline Corp. started building a \$63-million 1,080-mile LPG line from Houston to Danville, Va.

- Mid-America Co.'s 2,200-mile LPG pipeline from Texas to the Minnesota-Wisconsin area was virtually completed with all seven distribution terminals in operation.

- Plans for a \$35-million 1,080-mile pipeline from Texas to North Carolina were announced by a new group including Phillips Petroleum, Union Texas Natural Gas Corp. and affiliates of Gulf Oil and Standard Oil of Indiana.

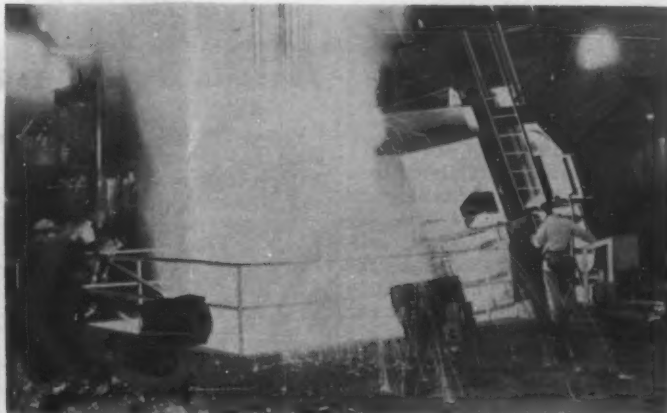
In submitting its proposal Southern California Edison said its line would run from the Texas Gulf Coast of Reynosa, Mexico, then northwesterly to the Los Angeles area. Target date for the first deliveries was set for July 1, 1962.

The proposed line would provide up to 455-million cu. ft. of gas daily, an amount equal to about 20% of Southern Cali-

fornia's total present supplies.

The joint Louisiana venture will increase LPG available by 17,000 bbl. daily, from the plants at Cow Island and Riverside.

In a report to stockholders, R. E. Thomas, Mid-America president, said construction of his company's LPG line was being completed on schedule and within the original budget. Initial capacity will be 50,000 bbl./daily with an ultimate capacity of over 85,000 bbl.



TAPPING THE FIRST ELECTRIC ARC FURNACE at Birdsboro Corp.'s new mill installation, workers pour metal into 45-ton capacity furnace. Five-year modernization program will triple company's steel capacity.

Birdsboro Triples Output

Birdsboro, Pa. — Birdsboro Corp. has fully converted its steel foundry production from open hearth to electric arc furnaces in a five-year, \$1,750,000 modernization program.

Installation of electric hearths has tripled the company's electric steel melting capacity, to 300 tons of steel daily.

Birdsboro formerly was limited to producing carbon and low-alloyed steels. It can now make all foundry types of stainless and high-alloyed steel, and has the capacity to make a variety of castings ranging from 50 lb. to 100,000 lb. in size.

Alcoa Begins Production Of 1 In. Cold Rivet Stock

Pittsburgh—Alcoa has started production of a larger size of cold rivet stock.

Coiled rivet rod used to produce bolts and other cold-headed products is now available from Alcoa in up to 1-in. diameter. The firm previously offered coiled rivet rod up to 0.615 in. in diameter.

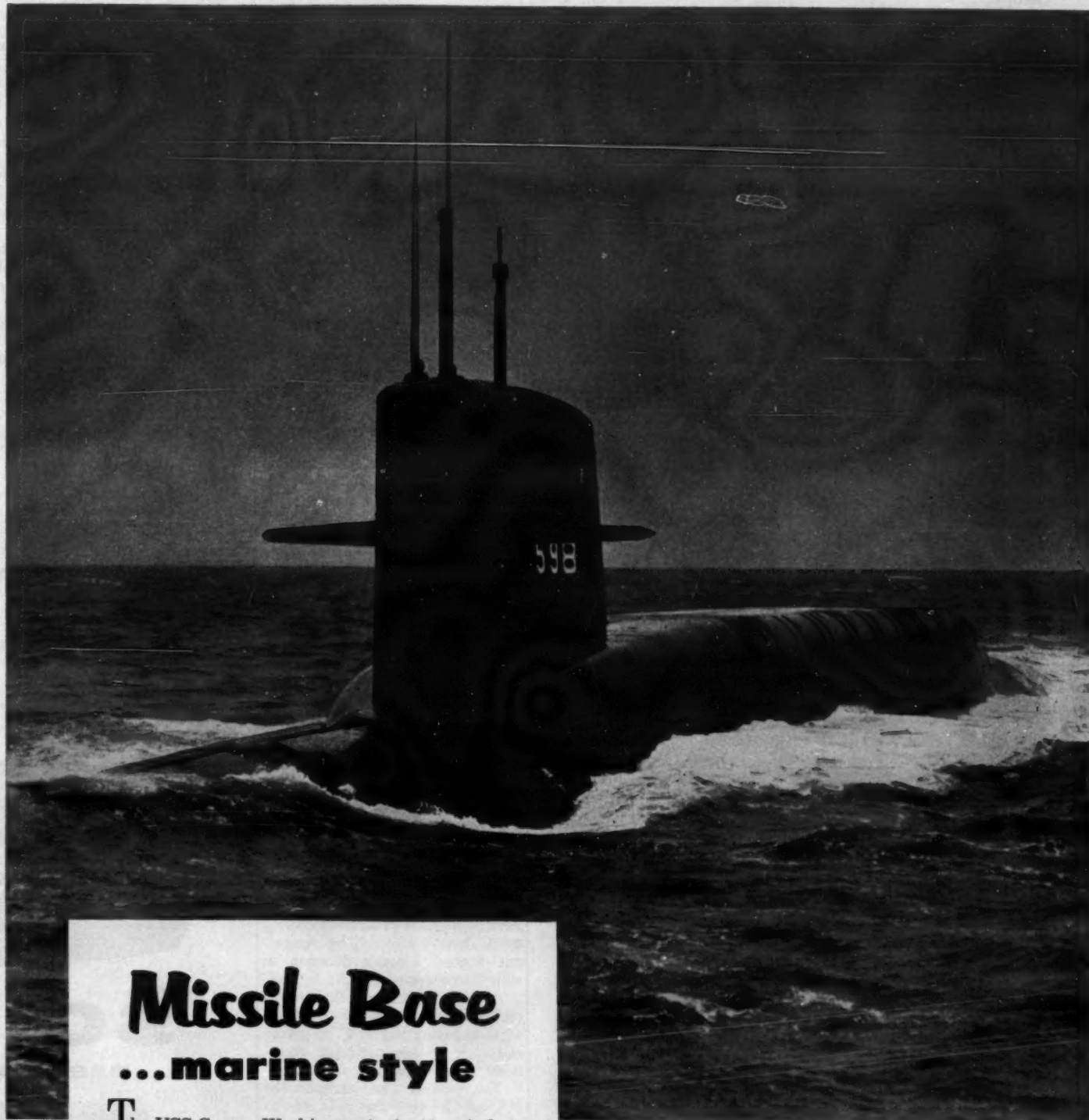
Manufacturers using 12-ft. aluminum stock for large diameter cold-heading operations now can switch to coiled rivet rod to boost output, a spokesman said.

The large diameter rivet stock is available in all suitable alloys in annealed and strain hardened tempers, in 120-lb. coils, measuring approximately 3-ft. ID. Larger 240-lb. coils are available for quantity orders.

Volume Buying Pays Off

Olympia, Wash.—Centralized purchasing pays off even in the purchase of such small items as paper clips, reports the Washington State Dept. of General Administration.

By consolidating purchases, the state was able to save \$1,450 on an 18-month contract for 50,000 boxes of paper clips. Volume buying reduced the unit cost from 7.5¢ to 4.6¢ per box.



USS George Washington new "on station" with the fleet I
OFFICIAL U.S. NAVY PHOTO

Missile Base ...marine style

The USS George Washington is the Navy's first submarine equipped to fire the Polaris missile from submerged positions.

Like the Patrick Henry, Nautilus, Triton, Sea Wolf and other nuclear-powered submarines, the George Washington contains equipment fabricated from stainless steel plate produced by Carlson.

It will be to your advantage to specify Carlson stainless steel plate and plate products. Our specialists produce exactly what you want and deliver it to you on schedule. Contact Carlson now.



G.O. CARLSON Inc.

Producers of Stainless Steel

144 Marshallton Road
THORNDALE, PENNSYLVANIA
District Sales Offices in Principal Cities



Plates • Plate Products • Heads • Rings • Circles • Flanges • Forgings • Bars and Sheets (No. 1 Finish)

Answers to Games on Page 20

Price War Game

As the Allkopy sales manager, you should bid \$99, for the Castleton Insurance Co. order. Here is what the matrix looks like:

	Universal Bids \$98	Universal Bids \$100	
Allkopy Bids \$98	\$1,000	\$5,000	\$3,000
Allkopy Bids \$99	\$3,000	\$5,000	\$3,000*
	\$3,000*	\$5,000	

Universal will get the contract—at the \$98 bid figure, the starred solution. But this will be a \$3,000 loss for Universal, and consequently a gain of \$3,000 for Allkopy.

This game shows that in the long run, when competitor's losses become gains for your side, it may pay you to hold back and not try to jump into a market at too low a price.

The Colonel's Pension

If you were the Colonel, you would decide to ask for bids and risk the possibility of being investigated. This is the safest outcome in terms of the values the Colonel has put on his reputation and pension. Here is what the matrix looks like:

	Apex Raises Price	Apex Doesn't Raise Price	
Colonel Asks for Bids	-5	0	-5*
Colonel Doesn't Ask for Bids	-20	+10	-20
	-5*	+10	

Apex would also seek a price hike on the bids for this is its safest course of action. The value of the game is -5, which shows that the Colonel has to make the best of a bad situation, but that he values saving his reputation more than the Directorship.



ALCOA'S JOBBING DIVISION CAN HELP KEEP THE FLAME HOT!

Because its own facilities were booked solid, Warner Lewis Company, Division of Fram Corporation, Tulsa, Okla., called Alcoa's Jobbing Division for help on a "hot" Air Force contract. Alcoa reviewed the design, produced critical parts for a Liquid Jet Fuel Filter-Separator which removes contaminants that cause "flame-out" when the plane is air-borne. Lightweight aluminum resists corrosion, does not react with jet fuel and is ideally suited for maintaining 100 per cent free water removal demanded by the specifications.

Whether you need design help, extra facilities or extra people, call your nearest Alcoa sales office today... and ask about the Jobbing Division.

GET THIS FREE, 16-PAGE BOOKLET!

Just mail the coupon below for a comprehensive, well-illustrated booklet describing Alcoa's Jobbing Division... the world's finest fabricating facilities... ways you can cut costs by using these facilities!

Your Guide to the Best in Aluminum Value



ALUMINUM COMPANY OF AMERICA
1868-M Alcoa Building, Pittsburgh 19, Pa.
Please send my free copy of Alcoa Aluminum Fabricating Facilities.

Name _____
Company _____
Street Address _____
City _____ Zone _____ State _____

White House Rejects New 'Buy-American' Move

Washington—U. S. manufacturers are losing another round in their fight to win domestic import protection against foreign competition through federal Buy American regulations.

The White House has rejected a recommendation, made through the Office of Civil and Defense Mobilization, to raise to 25% the price differential granted domestic bidders on contracts to supply government construction projects such as hydroelectric power installations. The present advantage is 6%, or—if the U. S. supplier is in a depressed area—12%.

Prior to 1954, when present differentials were put into effect by Executive Order 10582, the differential was 25%, but at the time foreign competition was less of an issue.

The suggestion for more protection was made as a follow-up to President Eisenhower's Nov. 16 edicts from Augusta, Ga., aimed at reducing government dollar spending abroad to help correct the U. S. balance of international payments deficit.

Backed by Hoegh

OCDM Director Leo A. Hoegh backed the move for more Buy American protection. It was turned down first by the White House trade policy committee headed by Clarence Randall, then formally discussed and rejected at a Dec. 1 meeting of the Budget Bureau.

The reason: Government spending of dollars overseas to buy equipment for domestic construction projects under Buy American regulations is so small that a shift in the purchases to the U. S. would not result in significant balance of payments savings.

Wants a Delay

Hoegh also proposed that all pending contracts under Buy American be either held up or awarded only to domestic bidders until the new Administration takes office Jan. 20. This, too, was turned down by the Budget Bureau and the White House.

get Bureau and the White House.

The mining trade was buzzing with rumors last week that the U. S. might sell to U. S. consumers from its metal-mineral stockpile instead of having them buy foreign imports. The thought was that this might be a partial balance-of-payments solution. Office of Civil and Defense Mobilization denies such a plan is under consideration, but President-elect Kennedy is reported toying with idea of reviving domestic stockpiling programs as a boost to domestic production and a hedge against dependence on foreign imports.

If metal-mineral stockpiling is revived under the new Administration, it will emphasize finished end products, rather than raw ores, concentrates, and metal-minerals.

Government News in Briefs

Denver Withholds Refunds

Denver, Colo.—City Auditor Thomas G. Currihan has held up payment of more than \$4,000 in tax sales refunds to the Public Service Co. of Colo.

Public Service officials argued that they should not pay a city sales tax on items purchased in Denver but used outside of the city limits.

City Attorney Donald E. Kelly, who was asked for a ruling, told Currihan that to withhold refunds from Public Service Co. was a "manifest injustice" and that the city should decline refunds only after the company had been properly notified.

Currihan said other businesses were not granted similar refunds and that he believed such refunds were contrary to the city's sales tax ordinance.

He said he was concerned because refunds by the auditor's office since 1947 had totaled more than \$300,000.

Oklahoma Purchasing

Oklahoma City—The Oklahoma state legislature is drafting a bill calling for the repeal of the state's central purchasing system.

The present system, authorized in 1959, permits the state to buy items for nearly all agencies through the state Board of

Affairs. The central purchasing system has drawn considerable criticism from state legislators opposing Gov. Edmondson's reform program, which put the system into effect.

Identical Bids in Dayton

Dayton, Ohio—City manager Herbert Starick has come up with this solution to the identical bid problem: Purchases of concrete during 1961 will depend on the nearness of a firm's plant to work sites where the concrete will be used.

Five Dayton firms had submitted identical bids which put prices for four grades of concrete to be used by the city at \$1 to \$1.30 cu./yd. higher than last year.

P.A. for Wyoming

Cheyenne, Wyo.—Gov. Joe Hickey has called for a full-time purchasing agent for the state of Wyoming. Hickey said he wants a department to consolidate budgeting, purchasing, personnel management, and financial management for the state.

The governor will submit his recommendations to the state legislature in 1961. The state's budget officer currently doubles as purchasing agent under the state Board of Supplies.

Truckers Accuse ICC Of Favoring Railroads

Madison, Wis.—A protest against piggyback rates allowed railroads by the ICC was made here by a group of Kenosha, Wis., truck drivers affected by American Motors Corp.'s decision to ship Ramblers to dealers by rail.

A dozen drivers and their wives picketed the Capitol carrying signs accusing the ICC of giving railroads more favorable treatment than trucking companies.

The pickets also accused the ICC of allowing the railroads to charge car hauling rates that do not accurately reflect costs, with the difference being made up by the taxpayer through subsidies to the lines.

Some 600 to 750 long-haul truckers were affected when American Motors began shipping its Ramblers from Kenosha to dealers by train. A total of 13,000 car haul drivers had been operating from Kenosha before the layoffs started in September.

American Motors said it is saving about \$50 a car on rail shipments from Kenosha to the West Coast.



solder

preforms

SILVER, GOLD, ALUMINUM
BRAZING ALLOYS

ONE SOURCE FOR ALL SHAPES
AND ALLOY COMPOSITIONS

RESPONSIBILITY FOR ACCURACY
FIXED AT ONE POINT

LUCAS-MILHAUPT Engineering Co.
5063 South Lake Drive, Cudahy, Wisconsin

Ball Bearing Firm Uses 'White' Room As Assembly Area

Sandusky — New Departure Division of General Motors has just opened an "ultra-clean" assembly area to step up the quality of its precision ball bearings. Dust is a major hazard to bearing makers.

Billed as one of the cleanest "white rooms" in the country, the stainless steel and glass area looks more like a hospital operating room than an industrial plant. All workers must go through special cleaning procedures when they enter, and a special all-white nylon uniform is mandatory.

The new installation filters out all particles bigger than 3/10 micron in diameter. Air in the room is kept at a higher pressure than the surrounding atmosphere so that flow of outgoing clean air will keep "dirty air" from getting into the room when a door is opened.

Controls hold the temperature within one degree of standard at a constant relative humidity of 40%. A complete air change is made every three minutes.

By definition, miniature bearings have less than 3/8 in. outside diameter or else a 1/2 in. or smaller diameter with an outside diameter-bore ratio of less than 2. They are used in a wide variety of instrumentation and control devices. New Departure recently made a bearing with an I.D. of only .01 in. and O.D. of .047.

The new facility is used for assembly and testing only. A companion room with less stringent environmental conditions was found good enough for machining operations. Prices of the precision bearings range up from several dollars to several hundred dollars.

Vending Machines Set For Ticket Selling Jobs

St. Louis—Automatic machines soon will be handling ticket selling chores for movies, pari-mutuel betting, transportation facilities, and stadium and park admissions.

This was the joint forecast of John L. Wilson, president of Universal Match, and M. Mac Schwebel, president of Universal Controls, who announced development of a new automatic currency acceptance and change-making devices, called Vendaticket.

The new machine already is in production, they said, and is on order by a leading movie theatre chain.

"With Vendaticket," said Schwebel, "a patron will walk into the theater lobby, insert the appropriate amount of bills or coin up to nine dollars, and press a button indicating the type and number of tickets. Almost instantaneously, Vendaticket will identify the currency, issue the tickets, and return the exact amount of change in bills and coin."

Wilson added, "Our development of a machine to identify one dollar, five dollar, ten dollar, and twenty dollar bills in a single unit will further accelerate and expand the use of Vendaticket."



EMPLOYEES WEAR special white nylon uniforms in ultra-clean bearing assembly room opened by New Departure Div., of General Motors.

Duro-Test Develops New Light Bulb

North Bergen, N.J.—Duro-Test Corp. has been granted patent rights on a new type of light bulb which the company claims "makes possible a bulb far more efficient than the present day incandescent."

The light, still in the development stage, works on a principle involving the breakdown of hydrogen molecules into atoms at a hot tungsten filament. The atoms recombine on the phosphor-coated bulb wall—causing the coating to glow.

Duro-Test would make no prediction as to marketing plans.

"We could be ready in a year, or it may take five," Luke Thornton, the company's research head, reported to **PURCHASING WEEK**.

Although the new bulbs are expected to cost more than conventional incandescents, increased light output will mean lower cost per lumen of light. The bulbs will work in regular 110v sockets.

Proper selection of phosphors is expected to produce a far greater variety of colors than is normally available in incandescent bulbs.



Maybe you need an array of Bostitch staplers under your Christmas tree to increase office efficiency. Does everyone who needs a stapler have one? Or does borrowing from one another waste busy people's time? It's a good time to make sure there's a stapler on every desk.

The B12, for instance, is the handsomest desk stapler available for busy executives.

The heavy-duty B5 makes life a lot easier and work a good deal more efficient where stapling traffic

is heavy. It is truly the "masterpiece of staplers."

Then there's the B8R—a stapler, a tackler, a plier—and a remover, too, in one compact machine.

Bostitch offers stapling machines for every conceivable need. And they are inexpensive enough so that everybody can have one. Call your Bostitch Economy Man. He has the facts on how to improve office fastening and lower fastening costs. He's listed under "Bostitch" in the telephone book. Or you can write direct.

Fasten it better and faster with

BOSTITCH
STAPLERS AND STAPLES

112 BRIGGS DRIVE, EAST GREENWICH, RHODE ISLAND

Here's your weekly guide to . . .



Paving Compound

Bonds in Any Weather

Bituminous patching and paving compound readily adheres to asphalt, concrete, and other paving surfaces in rain or freezing weather. Surface needs no preparation other than flushing with water to clean. It is ready for use after tamping or rolling.

Price: \$55 (55 gal. drum). Delivery: immediate.

Paramount Industrial Products Co., 2717 E. 75th St., Cleveland 4, Ohio. (PW, 12/19/60)



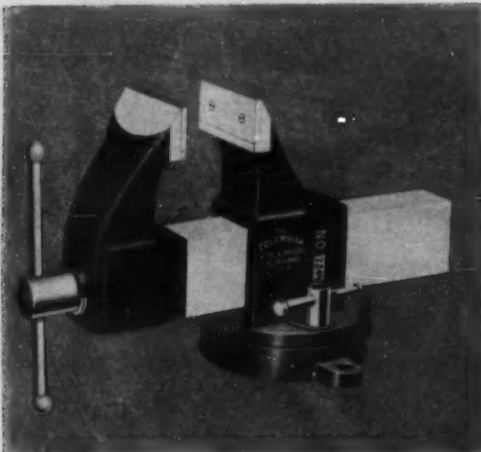
Adding Machine

Features Interlocks

Printing multiplier handles repetitive jobs such as inventory calculation and payroll computation. One factor is entered on keyboard, the other on a multiplier wheel. Multiplier key is then depressed. Interlocks prevent malfunctioning of listing and control keys.

Price: \$319. Delivery: immediate.

Burroughs Corp., Equipment & Systems Div., Detroit 32, Mich. (PW, 12/19/60)



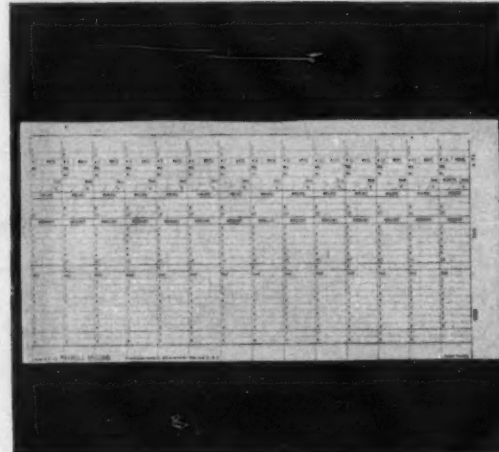
Vise

Swivels and Locks

Vise has replaceable steel jaw faces and malleable iron unbreakable castings. Swivel base permits it to swing freely and lock in any position. Jaws are 4½ in. wide and open to 9 in. Throat depth is 5¾ in. Vise weighs 60 lb.

Price: \$61.60. Delivery: immediate.

Columbian Vise & Mfg. Co., Cleveland 4, Ohio. (PW, 12/19/60)



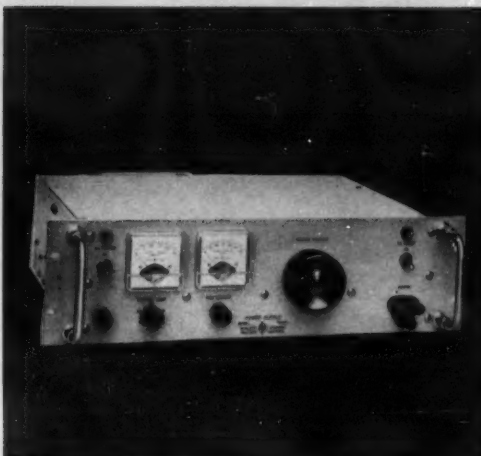
Payroll Record

Cuts Preparation Time

Pre-aligned, quarterly payroll form set (5-part snapout, 6-in. x 12-in.) eliminates need for adding individual earnings. Required total is by-product of monthly payroll master.

Price: \$14.98 (100). Delivery: immediate.

Foldaligned Forms Co., 419 Broome St., New York 13, N. Y. (PW, 12/19/60)



Power Supply

Gives 0-60V DC

Transistorized d.c. power supply has output of 0 v to 60 v at 0 amp. to 2 amp. Model's circuit limits current to preset value to prevent damage to transistors under test. Low noise and ripple enhance measuring accuracy. Specifications apply from 0 C to 55 C.

Price: \$525. Delivery: 12 wk.

Hewlett Packard Co., 1501 Page Mill Rd., Palo Alto, Calif. (PW, 12/19/60)



Ladders

Reach Up to 15 Ft.

Custom-made ladders come in choice of five styles in galvanized cast iron, cast bronze, or fabricated stainless steel. They will reach platforms up to 15 ft. high. Widths are 19 in. or 26 in. Flanges are provided to secure ends to floor and platform.

Price: \$45 to \$150. Delivery: 3 to 5 days.

Perma, Inc., Pleasantville, N. Y. (PW, 12/19/60)



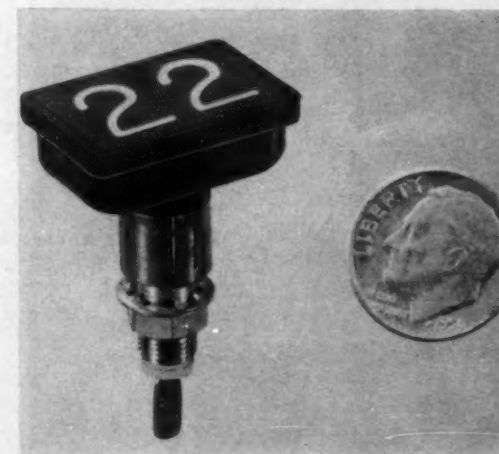
Drill

Has High Stall Torque

High stall torque of ¾-in. electric drill lets it drill masonry with carbide bits and make large diameter wood holes with hole saws and fly-cutter bits. It also is suited for drilling stainless steel and other tough alloys. Free speed is 850 rpm.

Price: \$65. Delivery: immediate.

Thor Power Tool Co., 175 N. State St., Aurora, Ill. (PW, 12/19/60)



Indicator Light

Has "Back Lighting"

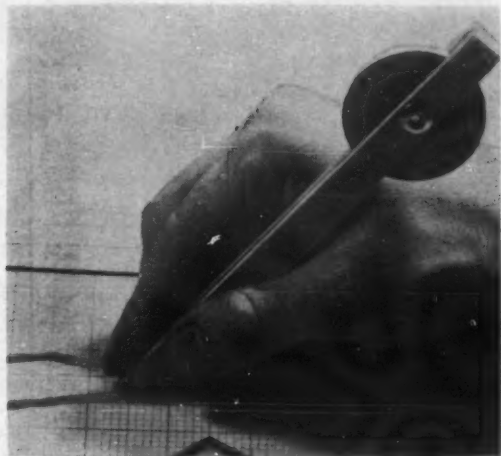
Indicator light is "back lighted" to give maximum identification at a distance. Plastic faces take two ½ in. or three smaller digits or letters. Flanged bulb is designed for 6v., 12 v., or 28 v.

Price: \$1.25 to \$1.75. Delivery: 2 to 3 wk.

Glar-Ban Corp., 3807 Harlem Rd., Buffalo 15, N. Y. (PW, 12/19/60)

New Products

Another PURCHASING WEEK service: Price and delivery data with each product description.



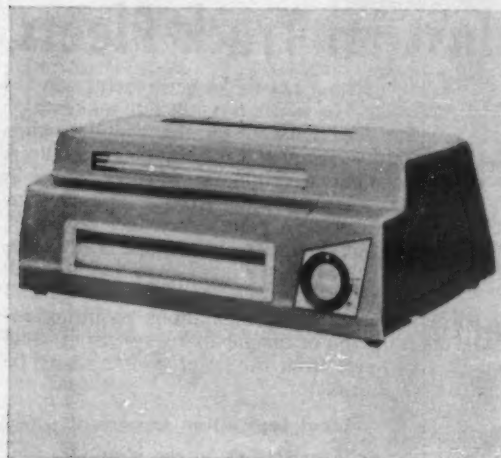
Pen

Applies Chart Tapes

Plastic pen applies narrow width tapes to make charts and layouts. One size takes pressure-sensitive tape widths of $\frac{1}{4}$ in., $\frac{3}{8}$ in., and $\frac{1}{2}$ in. Second size takes only $\frac{1}{8}$ in. Cutting edge cuts tape at exact point desired.

Price: \$1. Delivery: 3 to 10 days.

Labelon Tape Co., Inc., 450 Atlantic Ave., Rochester 9, N. Y. (PW, 12/19/60)



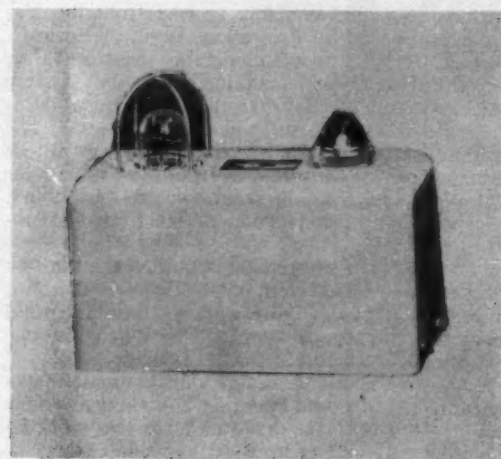
Photocopier

Uses Chemical Cartridge

Photographic copy machine uses chemical cartridge that eliminates mixing and pouring. Chemicals flow into chamber when machine is turned on and return to cartridge when not in use. Plastic case is removable in seconds for maintenance.

Price: \$200 to \$300. Delivery: 2 wk.

Photorapid Corp., 236 Fifth Ave., N. Y. 1, N. Y. (PW, 12/19/60)



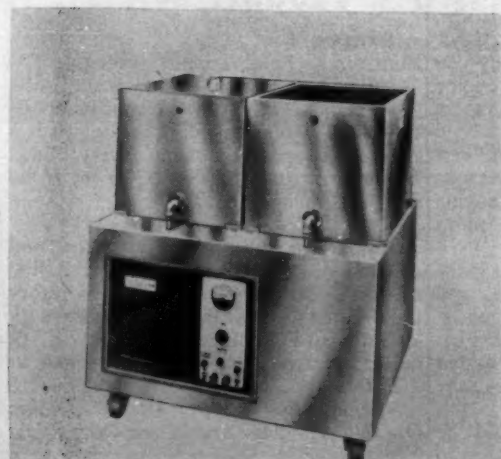
Fire Detector

Also Senses Flame-Outs

Electronic tube, sensitive to ultraviolet radiation in flame, can be connected to a warning light, audio alarm, or arranged to activate controls. It also can detect flame-outs and operates within a range of -65°C to $+200^{\circ}\text{C}$.

Price: Approx. \$80. Delivery: 10 wk.

Thomas A. Edison Industries, Instrument Div., West Orange, N. J. (PW, 12/19/60)



Ultrasonic Cleaner

Handles Fragile Items

Ultrasonic cleaning unit consists of 2, 12-gal. tanks and pumping system. Device thoroughly cleanses laboratory glassware and other fragile items, and needs no supervisory operator. Mobile unit plugs into any standard 110 v. outlet.

Price: \$5,985. Delivery: 4 wk.

Circo Corp., 51 Terminal Ave., Clark, N. J. (PW, 12/19/60)

This Week's

Product Perspective

DECEMBER 19-25

URETHANE COATINGS are expanding rapidly into new markets where product durability is a sales plus. Manufacturers of golfballs and magnet wire were among the first to make use of the life-prolonging properties of urethane. Now these new tough coatings are being applied to an expanding list of consumer and industrial products, ranging from automobile tires to children's shoes.

Urethanes belong to the same chemical family as the soft, resilient polyester (urethane) foams, but they have a tighter molecular structure that makes them one of the most abrasion-resistant organic coatings available. Other plus factors include good electrical properties, fast drying time, good breathability, and excellent resistance to fungus and mildew.

• Big reason for the growing interest in urethane coatings is development of one-part oil-modified formulas to replace older two-part resin-catalyst mixes. Two-part systems had to be mixed just prior to application and used almost at once.

Properties of Urethane Coatings

Exterior durability	—excellent	Color choice	—unlimited
Water resistance	—excellent	Bake drying	—30 minutes
Abrasion resistance	—excellent	Air drying	—1-2 hr. (handle)
Maximum temperature	—300 F	Coating thickness	—1-2 mil
Toxicity	—slight	Impact resistance	—excellent

Oil-modified coatings dry the same way conventional paint does. But the user must pay a penalty in abrasion resistance (one-part formulas have considerably less) to get the convenience of easy application.

• Almost 300 U. S. paint companies are making the new oil-modified products. More than half of them entered the field within the last year. Oil-modified coatings already hold a production edge with an estimated yearly rate of 1-million gal. as against 500,000 gal. for two-part mixes.

Here's a rundown on the four major classes of urethane coatings:

Two-package. Two components (resin and catalyst) must be mixed just prior to use. Pot life is limited. **Major uses:** heavy-duty applications where cost is secondary factor—tank car coatings, machinery, marine fittings, laboratory furniture.

One-package, moisture-cured. Moisture from the air sets off the reaction. Pot life is extended. **Major uses:** rubber goods, toys, furniture, textiles, leather, paper, floor finishes and concrete.

One-package, heat curing. Coating cures when temperature goes above 300F. Pot life is extended. **Major uses:** wire coatings, cans, drums, paper, tanks, glass coatings.

One-package, oil-modified. One component, ready to be used as it comes from can. Oil drying mechanism is similar to regular paints and gives unlimited pot life. **Major uses:** exterior wood, interior floors, furniture, boat finishes.

LEATHER could develop into one of the major urethane markets. It most probably will be the first to catch the public eye. Endicott Johnson will bring out a spring line of urethane treated leather shoes next year. The treatment is claimed to increase wear about 700%. Patent for the treatment is held by a group of seven companies (six tanners and Endicott Johnson). International Show in St. Louis reports that it is using urethane to upgrade patent leather. Tires are also coming in for their share of attention. Major rubber companies are reported experimenting with treated sidewalls.

Urethane coatings on golf balls will outlast the ball itself. Another present use: coating magnet wire. Although makers are trying to promote urethanes as auto primers, Detroit has shown little interest in revamping production lines to handle the newcomers.

NEW OIL-MODIFIED coatings will probably make biggest impact in paint field. Likely candidates: clear-type floor, marine and furniture finishes, pigmented finishes, traffic paints, anticorrosion primers, and equipment finishes. Clear finishes now take about 80% of the market. Drying time is short—about two hours to tack-free and abrasion resistance is good. Big drawback is price which runs about 40% higher than for alkyls.

Urethane's poor ultra-violet resistance (prolonged sunlight tends to yellow the coatings) must be considered if appearance is a major consideration on out-of-doors jobs. Manufacturers are hard at work trying to improve this quality, but it's considered a minor limitation except on certain consumer markets.



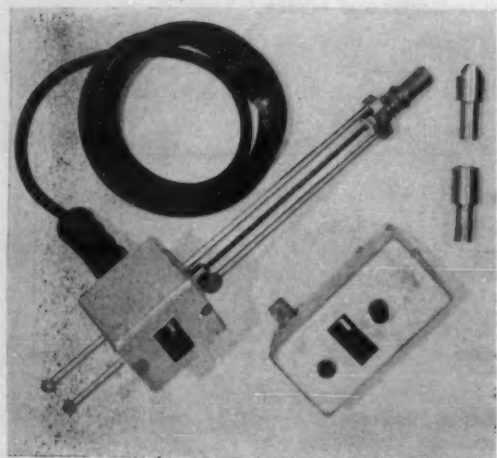
Paint

Withstands Up to 1,200 F

High heat aluminum paint for interior or exterior use withstands temperatures up to 1,200 F. It can be applied by brush, spray, or dipping. It resists industrial fumes, most acids, salt spray, and weathering.

Price: \$2.95 (1 qt.), \$10.85 (1 gal.), and \$52.50 (5 gal.). Delivery: immediate.

Speco, Inc., 7308 Associate Ave., Cleveland 9, Ohio (PW, 12/19/60)



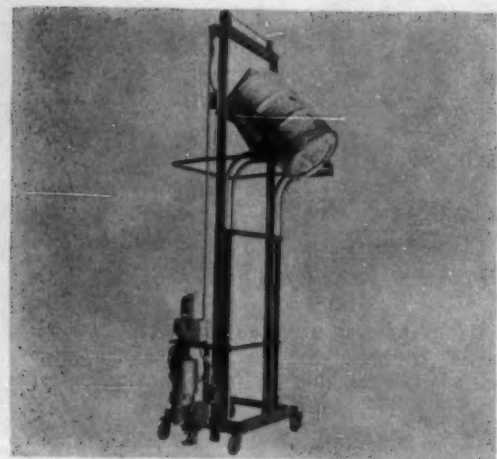
Weld Gun

Bonds Dissimilar Metals

Welding gun permits distortion-free bonding of similar and dissimilar metals in any combination from 30 gage to heavy plate with no back-up. It uses 14-in. welding rods (1/32-5/32-in.) and can use stainless steel electrodes for welding stainless or dissimilar metals. Works on a.c. and d.c.

Price: \$149. Delivery: immediate.

No-Arc Equipment Co., 321 Academy St., Newark, N. J. (PW, 12/19/60)



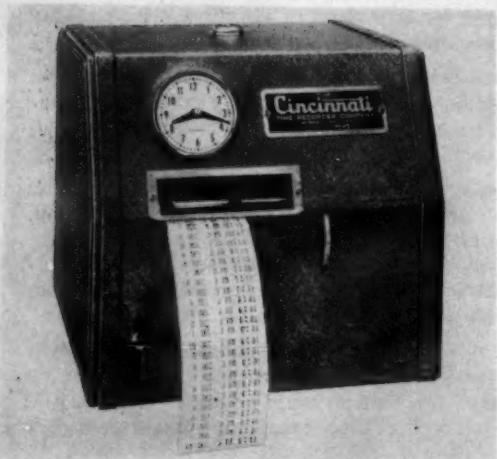
Dump Rack

Positions Drums

Dumper lifts and positions 55-gal. drums weighing up to 1,000 lb. Standard dumping height is 6 ft. but units can be equipped to lift a load to 12 ft. Controls are constant-pressure pushbutton. Unit comes with 220 v., 440 v., or 550 v. motor.

Price: \$1,295 to \$1,385. Delivery: 2 wk.

Colson Corp., 7 S Dearborn, Chicago, Ill. (PW, 12/19/60)



Recorder

Times Remote Stations

Unit, consisting of master printer and relay cabinet, records and prints information from as many as 10 remote stations. It can time and identify any remote activity activated by the closing of an electrical contact.

Price: \$300 to \$500. Delivery: 6 wk.

Cincinnati Time Recorder Co., 1733 Central Ave., Cincinnati 14, Ohio. (PW, 12/19/60)

How Propane And Gas Truck Costs Stack Up

	During 1st Year		During 5th Year	
	Gas	Propane	Gas	Propane
Book Value.....	\$3,278	\$3,403	\$655	\$680
Taxes and Insurance..... (1% valuation)	34	34	6	6
Fuel Gas: 20¢ gal. Pro: 20¢ gal. (.875 gal./hr. consumption)	364	364	364	364
Oil, at 25¢ qt..... (gas: 1 qt. per shift) (pro: ½ pt. per shift)	65	14	65	14
Parts & Maintenance.....	300	150	700	450
TOTAL.....	763	562	1,135	834
PROPANE SAVINGS.....	\$200		\$301	

Figures based on one shift, 2,080 hr. operation per year, and average prices. Data compiled by Propane Industrial Service, Inc., Mentor, Ohio.

Savings Help LPG Make Inroads As Fuel for Industrial Truck Fleets

New York—More and more companies are switching their industrial truck fleets to liquefied petroleum gas (LPG). They're making the changeover from gasoline, they say, because LPG:

- Cuts down on carbon monoxide.
- Boosts engine life.
- Reduces maintenance.

Sales of LPG as a motor fuel hit 937-million gal. in 1959. That's 10% higher than the 1958 total of 852-million gal. and almost 50% above the 640-million gal. sold in 1955.

LPG, a derivative of natural gas and crude oil, is usually 100% propane or a mix of propane with a low percentage of butane. The fuel is transported and stored under pressure in a liquid state, and vaporized at point-of-use to enter the engine combustion chamber as a clean, dry gas.

The vaporized gas readily mixes with air in the carburetor to give almost complete combustion. This reduces the carbon monoxide at the tailpipe by as much as 90%, tests show, and also eliminates eye-burning, nose stinging aldehydes—a big plus factor in warehouses and other confined areas.

Since LPG enters the carburetor as a dry gas, there is no oil dilution—no way for the fuel to wash down cylinder walls and enter the crankcase. Symington Gould Corp., of Depew, N. Y., notes that the use of LPG in its industrial trucks has cut oil consumption while increasing engine life. Because there is no contamination of lubricants—and no way for gums, sludge, or varnish to form—maintenance and resulting downtime are greatly reduced.

L. A. Iverson, of Pyrofax Gas Corp., New York, a major LPG supplier, says: "We don't hesitate to tell users they can expect at least a 50% saving in engine maintenance with a substantial saving in downtime."

LPG's approximately 120 octane rating (compared with regular gasoline ratings of 80 to 90) permits higher engine compression ratios which allow more efficient use of the fuel.

LPG is priced competitively with gasoline in most sections of the U.S. and Canada. There is a price variance in some areas, however, because of high LPG transportation costs. But added pipelines and better storage facilities may level out some of these differences.

Another cost factor that should be considered, users point out, is whether to

install the fuel tanks permanently on the vehicle or to use a removable tank, which can be replaced by the supplier when empty. As a rule of thumb, most users consider a minimum of five trucks is necessary to switch from a tank supplier to installing a plant's own fuel system.

Plant conditions may make it advisable for one reason or another to maintain the removable tanks along with the central supply. Safety regulations requiring installation of the gas-filling system at some distance from the plant building may be such a factor.

Local Legislation Important

Local legislation on the handling, use, and refueling of LPG also should be surveyed. Standards on safety for the use of LPG are contained in a handbook, NFPA No. 58, available at cost from the National Fire Protection Assn., of Boston.

LPG people credit this stress on safety factors with making their fuel system actually safer than the conventional gasoline system in in-plant operations.

Gasoline-powered lift and tow trucks can be converted to LPG use with a commercial kit in from two to four hours. Cost of conversion ranges from \$250 to \$350.

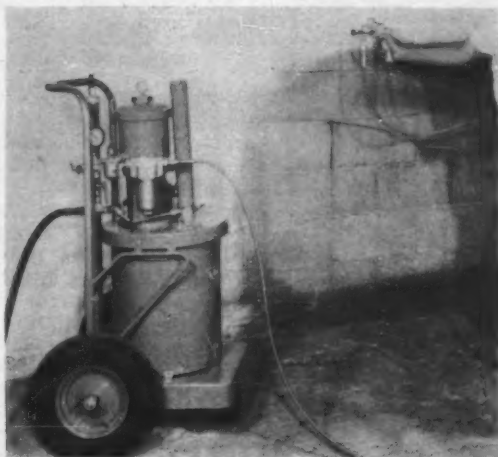
The conversion equipment can be transferred from one truck to another, but the truck's daily working time and total life expectancy should be taken into account before a change is made.

Experienced converters estimate that a truck should operate a full shift, five-days a week, and have at least two working years left to justify conversion costs.

Product Briefs

Swaging Tool works on large aluminum, brass, and copper tubing. The screw-type tool swages ½-in., ¾-in., 1-in., and 1½-in. o.d. Adaptors for the four sizes change easily. The tool assures perfect swage alignment every time. Imperial-Eastman Corp., 6300 W. Howard St., Chicago 48, Ill.

Immersion tubes, beaker filters, and dispersion tubes are available in a line of porous stainless steel. The laboratory units come in five porosity grades with average pore openings of 65, 35, 20, 10, and 5 microns. They can be heated to 400 C without change of weight due to oxidation. Pall Corp., Micro Metallic Div., 30 Sea Cliff Ave., Glen Cove, New York.



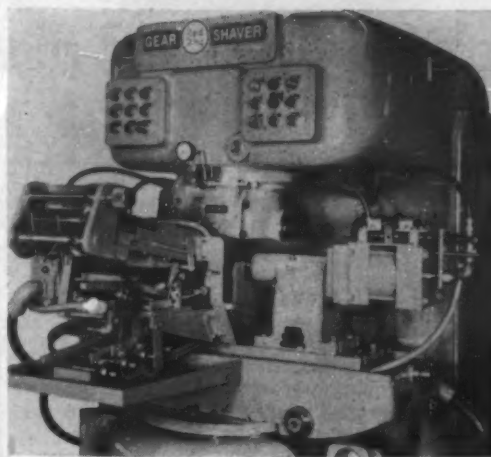
Spray Gun

Handles All Paints

Ten pump models (portable and stationary) handle all types of paint including water base. High fluid pressure at the nozzle of the airless spray equipment permits the use of two guns up to 75 ft. away. Airless spray eliminates bounce-back and reduces overspray.

Price: \$815 to \$1,175. Delivery: immediate.

Balcrank, Inc., Hi-Spray Div., 10 Disney St., Cincinnati 9, Ohio. (PW, 12/19/60)



Loader

Feeds Gear Machines

Automatic loader permits gaging of unsymmetrical parts before entry into input chute. Unit can feed and unload parts from rotary gear shaving or gear tooth honing machines. Loader is operated by an air cylinder that actuates a slide for "spaced" feeding.

Price: \$5,460. Delivery: 22 to 24 wk.

National Broach & Machine Co., 5600 St. Jean, Detroit 13, Mich. (PW, 12/19/60)

Product Briefs

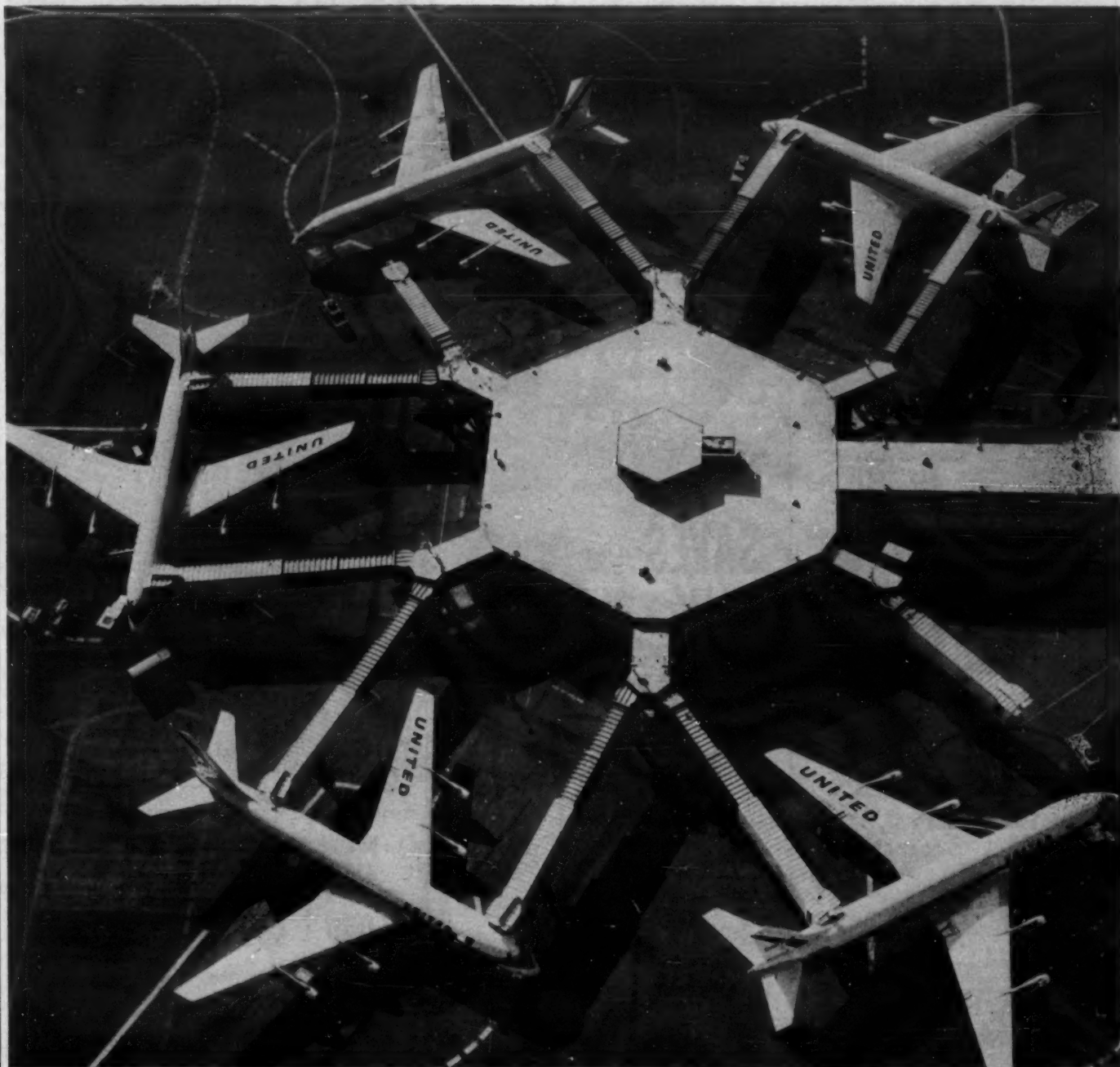
Collet actuator gives uniform and controlled holding pressure regardless of variations in chucking diameter. A stationary air cylinder is joined through ball bearings to the rotating machine spindle and draw tube. Draw tube pull is 1,200 lb. Model is designed to actuate any holding device requiring a pull-back action to operate it. *Power Grip, Inc., Rockfall, Conn.*

Digital-to-analog converter for control systems is designed for dual channel input. Each channel consists of three decimal digits and (+ or -) indication. Front panel lamp display indicates input data in 8421 BCD form. *Datex Corp., 1307 S. Myrtle Ave., Monrovia, Calif.*

Magnetic separator removes parts from tumbling media. Permanent, drum-type magnet pulls ferrous parts up out of the finishing media and deposits them on a moving conveyor belt for demagnetizing and delivery. *Rampe Mfg. Co., 14915 Woodward Ave., Cleveland 10, Ohio.*

Filler metal has flux core for faster and easier silver brazing, and assures the correct amount of flux for the size of the brazing alloy used. Composition is available in about 70 oz. to 80 oz. coils of 3/64 in. equivalent size. The size indicates amount of silver alloy expressed as a solid wire. *Air Reduction Sales Co., 150 E. 42nd St., New York 17, N. Y.*

Tangential fittings can be joined to pipe by rolled-in flanged assemblies, fillet welding, soft soldering, silver brazing, or butt welding. Designed for nominal temperature, low pressure process piping, the line includes elbows, returns, tees, caps, stub ends, and reducers in stainless steel or aluminum, 1/2-in. through 4-in. pipe sizes. *Flowline Corp., New Castle, Pa.*



UNITED AIR LINES FLIES JETS TO THE MOST U.S. CITIES ...TO GIVE SHIPPERS SAME-DAY DELIVERY

Every United Air Lines Jet Mainliner® carries freight—at nearly 600 MPH! A United DC-8 Jet has 10½ tons cargo capacity—each 720 Jet can carry 8 tons.

No other airline can move as much freight by jet as United. No other airline serves so many cities by jet as United. This is why jet freight is important to United... and important to you.

In less than a year, United's Jets have revolutionized shipping techniques. For example, you can now ship

coast to coast in less than five hours. So you can get same-day delivery everywhere that United Jets fly.

In addition, you can ship on United's fleet of fast Mainliners and Cargoliners. This combination lets you ship almost anything, anywhere, any time. So next time you want fast, reliable air freight service, call United Air Lines. Your freight will be handled with Extra Care.



THE NATION'S NO. 1 AIR CARGO ROUTE

SEARCHLIGHT SECTION

CLASSIFIED ADVERTISING
BUSINESS OPPORTUNITIES
EQUIPMENT—USED or RESALE

FOR SALE

80-ton Whitcomb Diesel
Electric Locomotive
in first-class operating
condition. Complete
specifications upon request.

Midwest Steel Corporation

Charleston 21, West Virginia
DI 3-9508

Purchasing Week Definition

Abrasive Materials

Diamond—Coarse diamonds (of the bort variety) are crushed and graded into usable sizes and bonded with synthetic resin, metal powder, or vitrified-type bond and used extensively for grinding tungsten- and tantalum-carbide cutting tools, glass, stone, and ceramics.

Emery—A cheap and impure form of corundum, it is used for metal and glass polishing.

Garnet—Certain deposits of a hardness between quartz and corundum are

used in the manufacture of abrasive paper.

Pumice—This material, of volcanic origin, is used extensively in leather, felt, and woolen industries, and in polishes for wood, metal, and stone.

Tripoli—A material with physical properties similar to chalk or clay. It is used widely in polishing powders and scouring soaps. Its porous structure suits it for use also as a non-conductor for steam pipes and as a filtering medium. (PW, 12/19/60)

LOOKING for the
RIGHT CUTTER
for those IMPOSSIBLE
METAL
CUTTING
Jobs!

Here's the Curtain-Raiser
to a Quick Solution!

HKP
PORTER
CUTTERS

There's a HAND or HYDRAULIC powered PORTER CUTTER to answer your toughest metal-cutting problems — over 100 different cutters, all designed to save you time, labor, and money! Make short work of cutting:

• Bolts • Rods • Screws • Rivets • Wire
• Chain • Steel Strapping • Soft,
Medium & Hard Metals & Many Others

CUT LABOR COSTS
UP TO 97%



The famous PORTER CENTER-CUT CUTTER... our most popular tool... is the leading all-around cutter for industrial use! For Free Cutting of Soft and Medium Hard Metals up to 3/4". Available in 6 sizes.

... and for "PRODUCTION" CUTTING



The PORTER WORK-STATION CUTTER can increase one man's output up to 300% in continuous volume cutting! In 3 sizes — up to 1/2" capacity!

ALSO... for those RUGGED JOBS!

The PORTER HEAVY DUTY CUTTER cuts almost anything in metal up to 1 1/2" diameter — thanks to its heat-treated, hard-tempered center-cut jaw! Comes in 3 sizes.

Contact your Industrial Distributor... or write for your free catalog with illustrations, detailed descriptions of the versatile PORTER line!

CUT up to 1 1/2" rods with HAND OPERATED TOOLS — up to 1 1/2" rods and 2 1/2" power cable with POWER OPERATED TOOLS.

H. K. PORTER, Inc.
Somerville 43, Mass.



ONE WAGNER SPACER used as a handle joiner

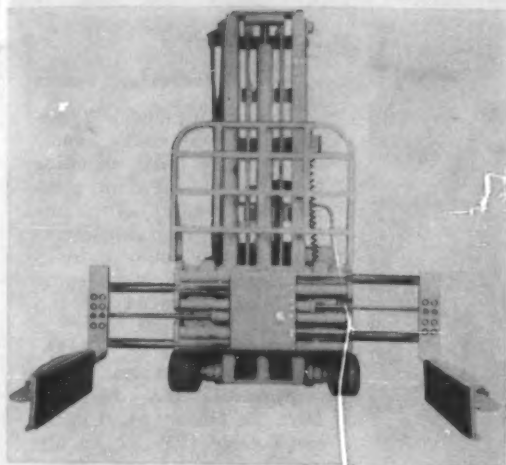


A manufacturer of a home waxing device given to retail customers as a premium, sought a method of producing a low cost wooden handle for the waxer. Our engineers adapted a butt joint spacer to the job. The handle-joiner device, as illustrated above, its butt joint: 180° slot; and center projection are all formed in one operation... a savings of approximately 76% over the usual machined threads and assembly method. This is just one example of how rolled, butt joint spacers save money on a wide variety of applications... often doing the work of two costlier machined fittings. Wagner spacers are available in: Lengths from 7/32" to 7"; I.D. from .100 to 2-1/16"; O.D. from .140 to 2 3/4"; Wall thickness .020 to .187. We also make a wide variety of brass, bronze, aluminum and steel spacers in "V" joint, diagonal or lock seam joints.

spacers for every application
write -- no obligation

Wagner
OF MILWAUKEE

E. R. WAGNER
Manufacturing Co.
4607 N. 32 St.
Milwaukee 9, Wis.



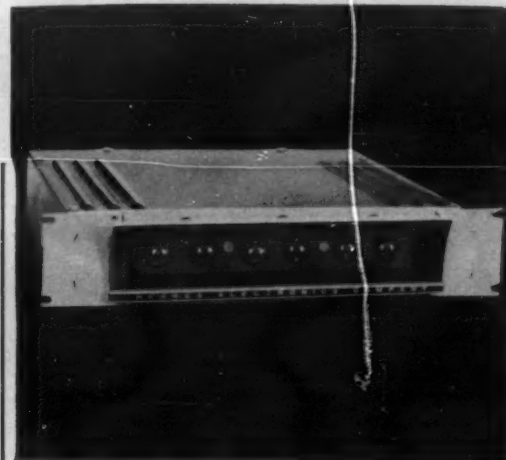
Fork Lift

Needs No Pallet

Electric truck's side shift clamp and rubber-faced pallet arms permit palletless handling of various sized loads. Fork's controls are located at the drive end of the truck. Auxiliary foot button control enables operator to ride the truck over long distances.

Price: Approx. \$4,600.
Delivery: 4 to 6 wk.

Lewis-Shepard Products, Inc., Dept. R10-44, 125 Walnut St., Watertown 72, Mass. (PW, 12/19/60)



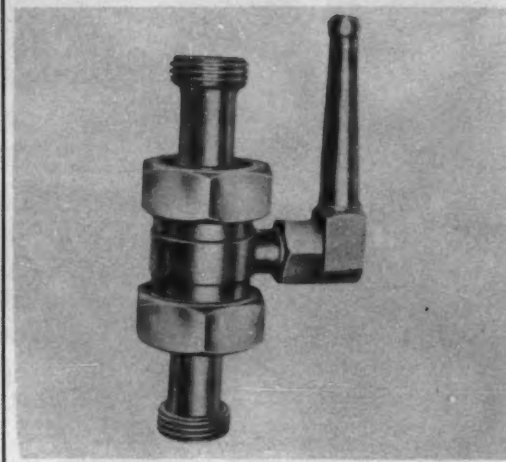
Display Assembly

Gives Decimal Readout

Solid state assembly gives 6-digit decimal display of binary coded decimal (BCD) data. It will accept up to 24 bits of parallel BCD information and convert this to a 60-line decimal display. Binary input may be static or parallel pulses.

Price: \$1,440. Delivery: immediate.

Hermes Electronics Co., 75 Cambridge Pkwy., Cambridge 42, Mass. (PW, 12/19/60)



Ball Valve

Meets Sanitary Codes

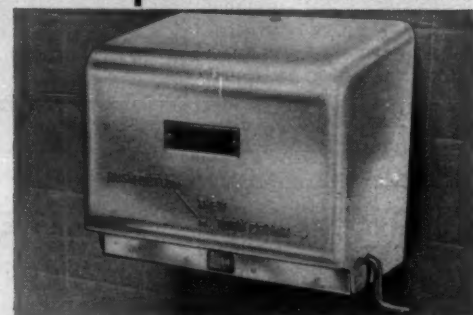
Valve is designed for food, dairy, and pharmaceutical industries. Available in 1-in., 1 1/2-in., and 2-in. sizes. It has a 150-psi. working pressure at 400 F. Extra large port opening eliminates turbulence and permits "on stream" cleaning by steam and wire brush.

Price: \$90 to \$150. Delivery: immediate.

Cooper Alloy Corp., Hillside, N. J. (PW, 12/19/60)

NEW Turn-Towl cabinet can't ever rust...it's polished aluminum!

"Biggest economy
news since the
Turn-Towl itself!"



You're looking at the first anodized aluminum cabinet on the market and its built-in advantages: no rust, wear, finger marks — easy to clean.

Thoroughly tested for two years, this polished aluminum Turn-Towl cabinet combines new durability and service with the proven towel control. For the name of your nearest distributor, write Dept. 1096.

MOSINEE
Sulphate Towels

BAY WEST PAPER CO.
GREEN BAY • WISCONSIN

Subsidiary of Mosinee Paper Mills Co.

Mosinee Turn-Towl cabinets are leased free for use with Mosinee towels

Purchasing Perspective

DEC. 19-25

(Continued from page 1)

But the committee rejected the idea as a less than satisfactory means of setting purchasing standards.

Rather, it was proposed that an "elite" group—to be called "Fellows in Purchasing"—be created. Purchasing "fellows" would be chosen on the basis of professional maturity, standards and judgment, contributions to the advancement of purchasing, association activities, and other characteristics that would classify them as "good citizens."

No concrete action was taken on the proposal. But those who prefer the idea over the concept of formalized licensing contend such a system would recognize a man for his all-around management and general leadership abilities rather than for his technical knowledge alone.

In the matter of inventories, P.A.'s may know where they are going but frequently their suppliers don't. On the basis of most recent reports, the general trend is still downward; but as production managers reach closer to the bottom of their inventory barrel, purchasing new order patterns become more and more confusing to suppliers trying to plan for customer's future needs.

Steel producers, for example, are running in circles trying to plot their January production schedules. Many, even those that can't actually detect much improvement in new order rates, are waxing optimistic because they are convinced steel is being consumed faster than it's being shipped. Others remain gloomy because of continued soft demand.

But they all agree on at least one point: Demand for most products remains spotty—with not much uniformity in orders from companies in even the same industry. A spokesman for one large Chicago Area producer reports, however, that orders for January delivery are piling up at a rate far exceeding December. This one mill, at least, is heartened by the fact that "more and more customers are telling us they are going to start buying soon at their usage rate."

BUYER'S GUIDE—Pricing plans are among the most popular topics raised at year-end conferences of top corporate executives. Few spokesmen indicate they have any sure way to beat the cost-price squeeze that is expected to continue in 1961—although GE said it is going to adopt this strategy on electrical equipment: 1) step up engineering and production efficiency, and 2) develop a better understanding of and respond more quickly to customer needs . . . many chemical equipment manufacturers are trying to rebuild profits in a highly competitive market by selling "packages". The idea is to offer customers a lower over-all cost by convincing buyers to order equipment in packaged units rather than putting out bids or negotiating on individual items with a number of supplier firms.

Price Changes for Purchasing Agents

Item & Company	Amount of Change	New Price	Reason
INCREASES			
Kerosene, No. 2 fuel oil, diesel oil, East Coast, gal. ....	.005-.01	....	seasonal demand
Phthalic anhydride, Monsanto & Koppers, tnkers., lb. ....	.01	.195	short supply
Naphthalene, U. S. Stl. (Jan. 7) & Koppers (Jan. 15), lb. ....	.0025 & .01	.0625 & .07	short supply
Acrylic fiber (acrilan), Staple & Dow, Chemstrand, lb. ....	.02-.04	.95-\$1.22	high demand
Home heating oils, kerosene, Mid-Cont. suppliers, (A) ....	.005	....	seasonal demand
Polymine T, Union Carbide, tnkers., lb. ....	.01	.12	
Phthalate ester plasticizers, Eastman, Monsanto, lb. ....	.005-.0075	....	phthalic boost
REDUCTIONS			
Lead, common, N. Y., lb. ....	.01	.11	oversupply
Zinc, prime West, East St. Louis, lb. ....	.005	.125	oversupply
Zinc alloys, No. 3, lb. ....	.0075	.155	metal cut
No. 5, lb. ....	.0075	.1575	metal cut
No. 2, lb. ....	.0075	.16	metal cut
Zinc dust, pigment grade, Carlots, lb. ....	.005	.165	metal cut
Lead sheet & pipe, lb. ....	.01	.165	metal cut
Lead oxides, dry red lead, Carlots, lb. ....	.01	.1375	metal cut
Litharge, carlots, lb. ....	.01	.1325	metal cut
Orange mineral, carlots, lb. ....	.01	.16	metal cut
Tin salts, potassium Stannate, lb. ....	.005	.784	metal ease
Sodium stannate, lb. ....	.006	.642	metal ease
Tin crystals, anhyd., lb. ....	.006	\$1.007	metal ease
Butyl acrylate monomer, normal, Dow, tanks, lb. ....	.05	.35	
Glycerin, crude, dom., soap lye, Basis 80%, lb. ....	.005	.165	oversupply
Saponification, 88%, lb. ....	.005	.18	oversupply
Gum rosin, N. Y., crlts., K. M. cwt. ....	.60	\$16.40	quiet demand
N. cwt. ....	.60	\$16.50	quiet demand
WG, cwt. ....	.60	\$17.50	quiet demand
WW, cwt. ....	.25	\$18.00	quiet demand

NAPA Mulls \$600,000 Development Program

(Continued from page 1)

subsidies for writers in the field of purchasing.

• Provide continuing and comprehensive development facilities for present career men in purchasing.

The hiring of an NAPA staff assistant to handle the proposed expanded professional development activities also is under consideration.

Members of the NAPA Executive Committee reviewed details of the plan at a session in Pittsburgh last month as part of the report of the Professional Development Committee headed by Harold A. Berry, purchasing director of the Chicago, Rock Island, & Pacific Railroad.

Berry, who discussed the pro-

gram at a Chicago meeting with other NAPA officers and key committee chairmen last week, said the report was "well accepted" and approved in "concept"—although no final action was taken.

Berry's committee worked with 12 key educators from leading universities in drawing up the program which, he said, drew a "few whistles" when unveiled. Here is the proposed long range budget to beef up the NAPA professional development program: 1960-61 — \$34,150; 1961-62 — \$143,150; 1962-63 — \$148,150; 1963-64 — \$168,150; 1964-65 — \$173,150. The five-year total is \$666,750.

Berry gave PURCHASING WEEK details of the program after

NAPA President Boney indicated at a recent local association meeting that the professional development group had a major plan of this type on the drawing boards. Although it has been reviewed at least once by the NAPA Executive Committee, it still has to undergo further discussion as to its need and place in other NAPA projects.

But if approved by the executive group next March, much of the program—especially the financing of it—still would have to be presented to the association's 17,500 members at their June convention in Chicago.

The initial financing probably would be provided by the NAPA's national treasury. A proposed increase in national membership dues (from the present \$18 to \$25) already is under discussion by local NAPA groups and is due for formal action at the June convention.

Berry told PURCHASING WEEK that local associations probably eventually would be asked to pay for a "fair share" of the cost of the program if it is approved.

High Priority

The program, Berry said, has two high-priority — and high cost—features: setting up an initial \$50,000 fund for the fellowships and provision of other funds for purchasing professorships at \$15,000 per chair. The plan calls for starting these activities in 1961-62.

The fellowship fund would be distributed on the basis of \$1,500 for candidates for master's degrees in business administration and \$5,000 for Ph. D. candidates.

"The committee wants to establish chairs in purchasing in at least three major universities, such as Michigan State, Stanford, Harvard, or Columbia," Berry said in his report to the Executive Committee. This would give purchasing a major place in the college curriculum with supervision available for the work of candidates for M. A. and Ph. D. degrees.

Other Phases

Other phases of the program include: expenditures of \$35,000 a year for research grants and subsidies for writers, starting in 1961-62; underwriting internships for instructors, with allotments starting at \$2,000 annually and advancing to \$5,000; funds for printing and publishing commodity studies by various NAPA committees; and additional expenditures for educators serving as advisors.

"While the annual requests call for drastic expenditures, there is not one item that would be other than desirable or necessary if our association is to progress as a profession," Berry said.

Other features of the Berry Committee proposals included a series of management development workshops for top purchasing management starting next summer or fall. These would be financed through registration fees.

Also proposed was a series of district conferences that would go into detail on subjects of purchasing importance. These conferences (the first is scheduled for Oct. 26-27, 1961, at Newark, N. J.) also would be self-liquidating.

AMA Seminar Urges Closing Ranks to Meet Overseas Competition

Saranac Lake, N. Y.—A call for a more united approach to the problem of foreign competition was sounded at an American Management Assn. seminar on foreign imports.

One suggestion was the establishment of a nonpartisan National Economic Council to give direction and to coordinate the efforts of U. S. industry.

Management speakers, countering the idea that U. S. manufacturers fear competition, maintained they welcome foreign rivalry but "want to compete with the same ground rules."

The group said this would necessitate:

• Revision of antitrust laws regulating industries.

• Changes in tax laws to expedite equipment write-offs.

• Greater cooperation between labor and management away from the bargaining table to achieve the national ends of a stronger economy while maintaining foreign commitments.

Late News in Brief

Prices of Coke-Oven Chemicals Boosted

New York—Producers of coke-oven chemicals announced price increases for naphthalene and phthalic anhydride.

Koppers Co., Inc., will hike the price of naphthalene 1¢/lb., to 7¢/lb., effective Jan. 15, and of phthalic anhydride to 20¢/lb., up from 19¢/lb., on Jan. 1. U.S. Steel Corp. announced it will hike the price of the coke-oven chemical ¼¢/lb. to 6¼¢/lb. Monsanto Chemical Co. also raised spot prices 1¢/lb. to 19½¢ for tank car quantities and to 20¢/lb. for truck loads, effective immediately. New LCL price: 21¢/lb.

Behind the increases is a temporary shortage of both products, which should be alleviated when new petrochemical plants go on stream in 1961.

Rambler Offers 'E' Bond Rebate

New York—Fleet buyers can share in the Rambler rebate program announced by American Motors last week. AMC will award "E" Bonds to customers on the basis of sales increases recorded in the four-month period starting Dec. 1. Each 10% increase in sales over the same period of last year will mean the equivalent of a \$25 bond. In the case of industrial fleet buyers, AMC said, the rebate bonds will be made out to the car owner's firm.

Chromalloy Unveils \$50 Afterburner

Los Angeles—Chromalloy Corp. has developed an inexpensive \$50 afterburner that eliminates smog-causing hydrocarbon gases from car exhausts. Test results will be submitted to the California Pollution Control Board to gain certification for the device.

General Tire Asks Royalties

Akron—General Tire & Rubber Co. is asking other tire makers for a royalty of ¾¢/lb. for tires using oil extended synthetic rubber for the tread. General Tire won a patent on the process last week and filed patent suits against Goodyear Tire & Rubber Co. and U. S. Rubber Co. Royalties could bring \$3.9-million annually if the firm succeeds in licensing all users of the process.

Electrical Equipment Firms Ponder Philadelphia Effect on Price Policies

(Continued from page 1)

utilities and government agencies during the period covered by the federal government's price-fixing indictments.

Federal grand juries in Philadelphia returned more than 20 indictments this year that named 29 firms and 46 officials on anti-trust charges in the sale of heavy electrical equipment during 1956-59. Practically the entire lineup of cases was disposed of without trials in federal court Dec. 8 when 19 manufacturers pleaded guilty on some indictments and no defense on others. Ten companies entered pleas of no defense only. Sentences will be handed down early next year.

Government attorneys told PURCHASING WEEK that a major difficulty faced in possible damage suits would be establishing amounts of damages. (Under law, defendants can be sued for triple damages in proved cases of price fixing.)

Attorneys pointed out that inasmuch as the alleged violations were spread over the period of 1956 to 1959, a price basis could require extensive arbitration.

In agreeing to make "cooperative studies" of customer purchases, G.E., Westinghouse, and Allis-Chalmers presumably were aiming to clear up possible areas of disagreement. But each insisted customers suffered little, if any, damage.

Meanwhile, moves to initiate damage suits were developing, mostly among government agencies that bought equipment from the defendants during the period the government alleged various companies rigged bids or engaged

in conspiracies involving prices or markets.

Robert A. Bicks, head of the Justice Dept.'s antitrust division, said the federal government was considering filing suits on behalf of numerous federal agencies.

The office of California Attorney General Stanley Mosk said state agencies may join in a single suit against suppliers. San Francisco officials tentatively claimed that the city's losses may have gone as high as 20% on the more than \$6-million spent on electrical equipment over the past several years.

The American Public Power Assn., representing municipal co-ops, said a memorandum will be prepared, spelling out for association members the areas open to damage claims.

The Tennessee Valley Authority, the agency that was instrumental to a large extent for the government investigation, said it still had to decide what action it might take now.

It appeared to some observers that the federal government was in effect abetting the filing of damage claims. It asked the court to order the equipment makers to send copies of the final judgment in the cases, along with a "new price list", to each customer.

Buyers of electrical equipment had mixed opinions as to the future course of buyer-seller relations as a result of the Philadelphia action. Many said they believed the cases had had little effect on prices, arguing that a fierce competitive market was responsible for major price declines which have come about in the past year.

(Continued from page 1)
truck), and White's PDQ line of multistop trucks.

In the passenger car field, the present lineup includes 10 entries and by next model year, this field may be swelled by a rash of smaller, four-passenger compacts (100 in.-or-less wheelbase) now reported to be on the drawing boards of the five American automobile companies.

At the moment, according to Howard Cook, Ford fleet sales manager, the fastest growing market for the little cars is among insurance and utility companies. The reason: Austerity is an important consideration for companies whose profits are regulated.

But other commercial buyers are going for the compacts in a big way, too. A few, such as Procter & Gamble and General Foods have made a 100% switch to the small cars for non-supervisory personnel. Specifically, these are some examples:

American Telephone & Telegraph Co. is encouraging the use of compacts among member companies, most of whom are expanding their compact fleets.

Pacific Telephone & Telegraph in Seattle, for example, has 324 passenger cars, of which 123 are compacts (mostly Valiants and Ramblers, plus Larks, Comets, and Corvairs).

With the exception of a few executive cars, it expects to replace all its passenger cars with compacts during the next five years. Of the truck fleet, 955 units in the half-ton class could conceivably be replaced with compacts during the same interval, the company says. All trucks now used by telephone installers definitely will be replaced with compact trucks. Replacements will be at the rate of about 20% a year.

New England Telephone & Telegraph Co. has converted 10% of its 550 passenger cars to compacts and definitely will buy Ford Econolines and Chevy Corvair 95s (Corvans). The firm considers them suitable for carrying phones and installation equipment.

Auto makers themselves report substantial penetration of the fleet car market by the compacts and look for even higher sales this model year. Some predict an over-all boost of from 3% to 4% over 1960. Here's how the five auto companies size up their prospects:

● **Studebaker**—Fleet sales have climbed from 8% to 10% of the total and could well go higher in 1961. A. E. Fitzpatrick, fleet sales manager, credits pre-introduction testing by big fleet owners for a recent sale of 600 vehicles to the State of California. He notes a pickup in demand for automatic transmissions and comments: "Those who buy for economy go all the way in austerity. Others go to the top of the line."

● **Chevrolet**—Fleet sales are termed excellent for both standard car and Corvair. Seven per cent of Chevy sales are fleet, with a breakdown of 95% Chevrolet, 5% Corvair. Buyers are becoming more accessory minded, ac-

cording to a Chevrolet official. In Corvairs, for example, 92% of fleet buyers order heaters, 46% radios, 62% automatic transmissions, and (surprisingly) 61% whitewall tires.

Increased trade-in value is cited as the main reason for accessory popularity, but the big leasing fleets, such as Hertz, also boost the figures. Many fleets consider the automatic transmission a safety and maintenance-savings feature. Reason: The operator has one on his personal car and doesn't know how to drive a stick shift. Clutch and transmission take a fearful beating as a result of driver ignorance.

● **Ford**—This company has no figures yet on how the 1961 Ford and Falcon are doing fleetwise, but Howard Cook, fleet sales manager, expects the percentage to be up slightly. Falcon currently is accounting for about 25% of fleet sales.

In Ford experience, a majority of fleets are buying four-door sedans for greater convenience.

Resale of Compacts

Resale value remains the big question mark for the compacts. The best available clues, model by model, are these National Automobile Dealers Assn. figures on wholesale depreciation (based on auction price after one year of use). Note that in most cases the more luxurious model in the right hand column depreciates less than the regular model.

Compacts

Corvair 6-500	33.8%	6-700	33.7%
Valiant V-100	28.6	V-200	27.5
Rambler 6	32.5	V-8	32.9
Falcon 58A	28.1		

Standards

Chevrolet 6	33.4%	V-8	32.4%
Dart 6	31.9	V-8	31.2
Ford 6	35.6	V-8	36.0
Plymouth 6	36.5	V-8	34.9

They are better for family use off-hours, and even little things enter into it, such as having to take a few men out to lunch. A predominance of Ford fleet sales now include automatic transmissions (mostly for resale reasons).

● **Plymouth**—During the first nine months of 1960, Plymouth and Valiant fleet sales were running 7.6% of the total, with Valiant accounting for 1.3 of these percentage points. In 1956, fleet sales were 5.8%.

● **Rambler**—This make claims to be up 19% in fleet sales and forecasts an over-all 10% (or 55,000 units) in 1961. Model breakdown is American 31.1%; Rambler six, 58.3%; Rambler V-8 5.3%; and Ambassador, 5.3%. Sedans account for 61.1% of the total, wagons 38.9%. Accessories include 60% automatic transmissions, 97% heaters, 30% radios, and 3% air conditioning (on which a sales drive has just started).

Although all the automakers are

optimistic about 1961 sales, they admit that a great deal depends on the buying attitude of the rental and leasing companies. Most of these outfits still are somewhat on the fence because, although compacts rent for less, overhead and labor costs remain the same.

But this position, could change, observers think, if the leasing firms step up their campaign (launched two years ago) to corner 50% of the private fleet business. A successful drive would require lower-rental compacts.

At present, only an estimated 1% of the 151,000 vehicles owned by members of the American Automotive Leasing Assn. are compacts. However, the association says that leasing companies are showing more interest in compacts because companies maintaining their own fleets are buying more of them. This could lead to stepped-up compact buying in 1961, the association feels.

Fleet buyers, assessing the compact after a full year of operation, cite "substantial" economies—from initial investment through maintenance—as the main reason why they now are upping their purchases.

Most fleet buyers are impressed by the big savings in gasoline and garage space. One user—Laclede Gas Co., St. Louis—reports savings running as high as 40% to 50% on gas and oil. Together with nominal repair bills and savings on garage space, it estimates total savings of \$400 to \$450 per car in a 5½-year term. Other examples of savings:

● The State of California, comparing maintenance costs, cited these figures (cost per mile): Lark, 7 mills; Ford, 9.68 mills; Chevrolet, 1¢, 1 mill.

● City of Cincinnati reported savings in the first nine months of 1960 of 1½¢/mile which broke this way: .4¢/mile on original purchase; 1.1¢ on operating and maintenance.

● City of Dallas figures operating costs on standards at 7¢/mile as compared to 5¢ for compacts.

● Procter & Gamble says compacts are 8%-15% less expensive to operate and maintain.

But not all fleet buyers are going overboard on the little cars, according to PW's survey. A fairly sizable group, taking a somewhat cautious attitude on the newcomers, say they're waiting for more complete returns to come in. Still to be answered to their satisfaction is the big question of the compacts resale value (see box).

Metric System in Use

Toronto, Can.—Steel Co. of Canada, Ltd., has begun selling high tensile steel bolts and nuts produced to the latest standards of the International Metric System.

The Canadian firm is the first North American manufacturer to stock and supply metric system hexagon head bolts and nuts in a range of sizes from six to fourteen in diameter and in lengths up to 150 M.

The bolts are produced by the cold leading process and heat treated to meet a tensile strength of 85 kilo/sq. M.

Court Questions President's Right To Revise Tariff Recommendations

Washington—The President's long-standing authority to re-write Tariff Commission recommendations for import duty raises or quota curbs under escape clause cases was questioned indirectly by the Supreme Court last week.

The high court refused without comment to review a U. S. customs appellate court ruling that the President acted illegally in modifying a 1955 Tariff Commission recommendation for an import duty hike on foreign bicycles.

The President granted smaller tariff increases than urged by the commission. Importers challenged the decision to raise tariffs at all on grounds that the White House lacked authority to modify a commission finding. A customs court agreed, and the U. S. Court of Customs and Patent Appeals upheld the lower court.

The government took the case to the Supreme Court, where a review was denied last week.

Although the action directly involved bicycle imports, it also posed some possible implications involving industrial items, including such tariff-conscious commodities as lead and zinc.

Government lawyers contend that while the President had authority to modify in 1955, under the Reciprocal Trade Agreements Act, that authority was recognized still more clearly in the 1958 extension of the trade law, which included language setting procedure for the Presi-

dent in accepting, rejecting, or modifying Tariff Commission escape clause recommendations.

Whether or not the pending cases are fought out in court, President-elect Kennedy is considering asking Congress next year for clearer legislative authority to modify. The Administration proposal may come as part of the 1962 extension of the Trade Agreements Law, or possibly sooner in a separate legislative bill.

C&O Claims Victory in Fight to Control B&O

New York—The Chesapeake & Ohio Railway claimed victory last week in its fight with the New York Central Railroad for stock control for the Baltimore & Ohio.

The eventual goal of the C & O is merger with the Baltimore & Ohio to form a 11,000-mile line second in size only to the Pennsylvania.

At the deadline on its offer to exchange its common stock for that of the B & O the Chesapeake & Ohio said it had received tenders representing more than 53% of the B & O shares out-

standing. C & O President Walter J. Tuohy said he expected the final count to run even higher.

The Chesapeake & Ohio still has several hurdles to overcome before it can complete the proposed merger. First, the majority of stockholders of both roads must okay the plan. Then the C & O must convince the Interstate Commerce Commission that its merger proposals are more favorable than a rival proposal of the Central.

Both Chesapeake and Central have applied to the ICC to con-

trol the B & O. The commission's decision probably will be delayed until late in 1961. Meanwhile, the Justice Dept. has announced it is concerned about antitrust aspects (story p. 5).

The C & O claims that a merger with the B & O would produce savings of many millions of dollars annually by improving routes, consolidating terminals and operating management, eliminating the overlapping equipment repair facilities and improving operating and maintenance practices.

Hot Rivalry in Packaging To Benefit Buyers in '61

New York—Packaging competition will continue to increase next year, and the intense rivalry will benefit packaging buyers.

That's the prediction of Donald Pascal, president of National Starch & Chemical Corp., one of the planners of the 1961 National Packaging Exposition sponsored by the American Management Assn.

"In 1961 will begin a period of challenge to the packaging industry, ushering in a decade which will see a tremendous growth in packaging," Pascal said. "We will see the introduction and further development of new packaging materials and methods."

Pascal predicted greater packaging use of:

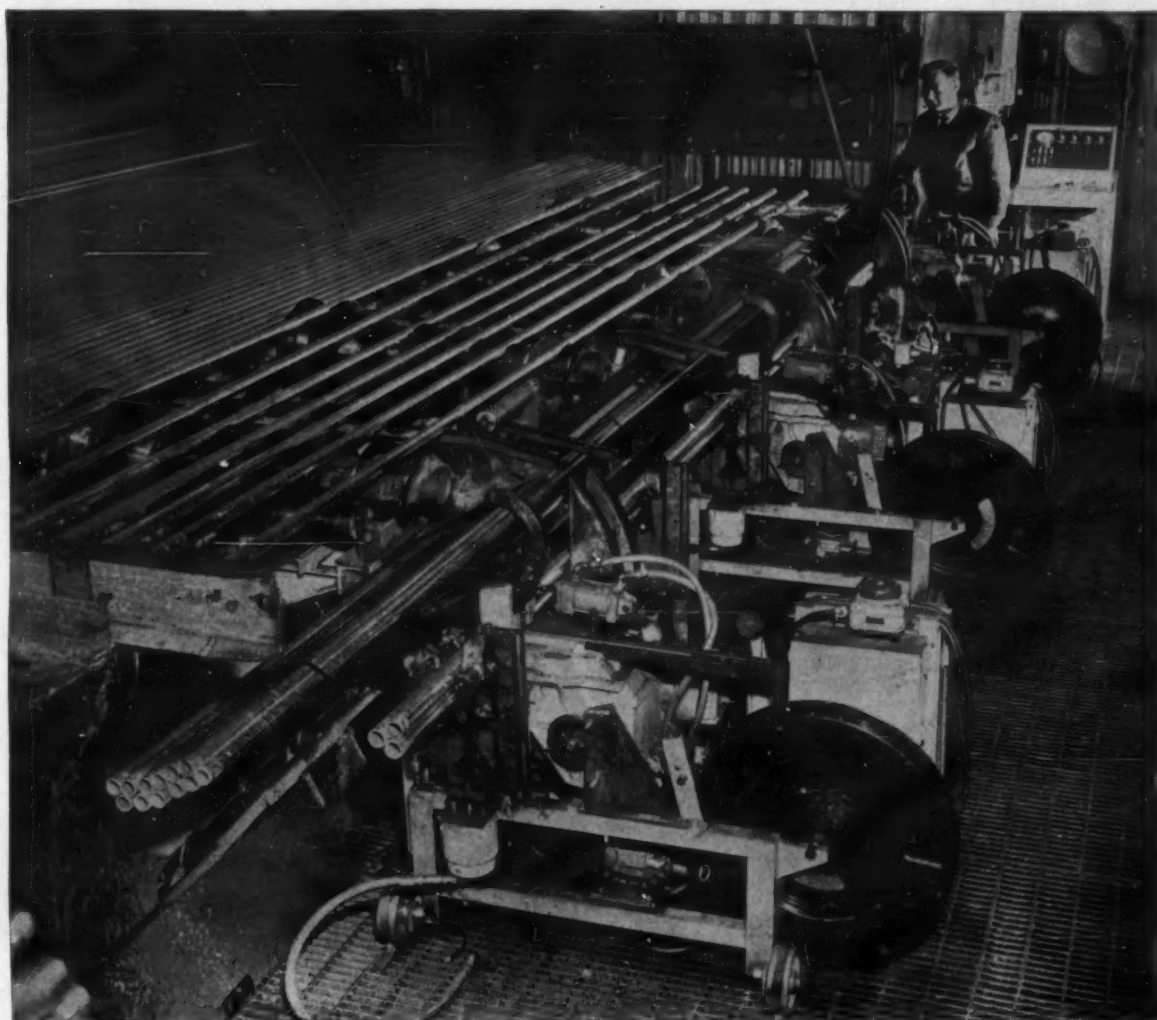
- **Polypropylene**—in the flexible packaging field.
- **Laminated materials**—offering combined properties of various materials.
- **Foamed plastics**, including polystyrene and polyurethane.
- **Aluminum cans**—further expansion.

In addition, Pascal said, "the use of lightweight glass containers will continue to expand."

"Perhaps most important will be the great emphasis on market and product development which will expand the market for packaging in 1961 to approximately \$18-billion in the U.S. alone."

Turning to packaging machinery, Pascal predicted the field will continue its trend to higher speeds, greater versatility and automation.

The AMA show to be held April 10-13 at Chicago's new Lakefront Exposition Hall is expected to draw 30,000 visitors to the show's 330 displays.



Courtesy of Blaw-Knox Company, Aetna-Standard Division

New Signode machines bundle pipe in seconds

Three synchronized Signode Model MS2BR power strapping machines are at work here. They automatically apply three straps per bundle. With these machines, it is now possible to keep ahead of the production of high speed pipe mills. Uniformly tight bundles are produced.

Similar Signode power strapping machines for pipe bundling have been proved depend-

able in more than six years of pipe mill service. They are ideal for strapping electrical metallic tubing and rigid conduit, as well as pipe. Write for more information about these machines or this installation. Signode counsel is available to help you work out a strapping installation that meets your requirements, no matter what your product. No obligation. Just write:



First in steel strapping

SIGNODE STEEL STRAPPING CO.

2670 N. Western Avenue, Chicago 47, Illinois

Offices Coast to Coast. Foreign Subsidiaries and Distributors World-Wide
In Canada: Canadian Steel Strapping Co., Ltd., Montreal • Toronto



**You can tell
the **SKF** man
by his complete line of bearings !**

One look at his line shows why he can fill so many different bearing orders. His line spans all four major bearing types—covers each completely with a tremendous range of sizes and variations. So, obviously, he's in a position to make buying bearings easy and economical for you. And remember, when buying bearings for replacement purposes—call on your nearby *Authorized SKF Distributor*.

6003

